DECENNIAL INDEX

VOLUME I, 1928—VOLUME X, 1937

AUTHORS AND TITLES

	Volume and Page
ABBOTT, FRANZ D. Machine for Testing Rubber Products Used to Absorb Vibration	I, 503
Rubber Vibration Insulators. Some Characteristic Properties and Tests	VI, 299
Testing of Automotive Rubber Parts Assembled under Compression	III, 431
Part 2. Compression-Set and Some Special Tests	III, 452
ACKEN, MARSHALL F., WILLIAM E. SINGER, AND WHEELER P. DAVEY. X-Ray Study of Rubber Structure	V, 30
ADAMS, L. H., AND R. E. GIBSON. The Compressibility of Rubber	III, 555
AKOBZHANOV, I. G. Synthetic Rubber. Its Industrial Production in the U. S. S. R.	VIII, 430
ALBERTONI, GEORGE J. New Autographic Machine for Testing Tensile Properties of Rubber	IV, 591
Impact Machine for Rubber Testing. Determining the Stress-strain Diagram at High Speed	X, 317
ALLEN, RAYMOND P. Method of Making Microsections of Rubber Stocks	III, 755
AMON, F. H., AND R. K. ESTELOW. Experiences with a Direct Accelerator-Adsorption Test	V, 429
ANDRIESSEN, ALBRECHT. *See* Pummerer, R.	
ANTONOFF, G. Plastic State	V, 129
Reënforcement of Rubber	V, 291
AOE, ICHIRO, AND HIROSHI KITAYAMA. Studies on the Combined Use of Two Different Organic Accelerators. V. Mercaptobenzothiazole and Hexamethylenetetramine	IX, 21
AOE, ITIRO, AND HIROSI YOKOSIMA. Studies on the Combined Use of Some Different Organic Accelerators. IV. Diphenylguanidine and Dibenzothiazole Disulfide	VII, 648
See also Minatani, Iwasaburo; Minatoya, Syukusaburô.	
ARIANO, R. Brittleness of Ebonite	X, 778
Coefficients of Friction between Rubber and Other Materials.	
Part I. Frictional Grip of Rubber-Tired Wheels	III, 67
Part II. Gripping Friction of Rubber Belting	III, 286
Relationship between Forces and Deformations, with Special Reference to Rubber	III, 62
ASANO, M. *See* Staudinger, H.	
AUER, LÁSZLÓ. Colloid-Chemical Changes in Rubber and Fatty Oils	II, 576
AYERS, JOSEPH W. Impure Iron Oxide as a Rubber Pigment. I. Effect of Ferric Sulfate on Cure and Aging of Rubber	V, 179
II. Cause of Aggregation and Poor Dispersion of Oxide of Iron in Rubber	V, 187
BACON, NICHOLAS. The Vulcanization of Rubber	II, 138
BÄCHLE, OTTO. Investigations of Dispersing Agents and Stabilizing Agents for Latex Mixtures, and the Behavior of Latex Mixtures When Stored	IX, 252, 544
Viscosity of Latex and of Latex Mixtures	X, 675
BAIRD, W. *See* Naunton, W. J. S.	
BAKER, L. M. *See* Oldham, E. W.	
BALANDINA, W. *See* Dogadkin, B.	
BALL, J. M. *See* Somerville, A. A.	
BARNES, WILLIAM H. Note on the Diffraction of X-Rays by Old Specimens of "Frozen" Rubber	X, 462
BARNETT, C. E. Effect of Pigment Particle Size on Some Physical Properties of Rubber Compounds	IX, 597
——, AND W. C. MATHEWS. Thermal Properties of Rubber Compounds. II. Heat Generation of Pigmented Rubber Compounds	VIII, 138
BARR, GUY. The Aging of Cotton Contained in Rubber Goods	III, 53
BARRER, RICHARD M. Nature of the Diffusion Process in Rubber	X, 673
BARRON, HARRY. Adsorptive Properties of Carbon Black	VIII, 91
Reinforcement and Stearic Acid	IX, 301
Tensile Properties of Latex Products	VIII, 268
——, AND F. H. COTTON. Hysteresis and Reinforcement	V, 336
BARTENEV, S., A. ZHURAVLEV, AND I. LOZOVSKAYA. Iron Oxide as a Substance for Increasing the Adhesion of Ebonite to Metal	IX, 605
BARY, PAUL. Constitution of Rubber According to Its Swelling in Liquids	III, 576
Micellar and Molecular Solutions of Rubber	V, 123
Viscosity of Latex	VII, 634
——, AND E. FLEURENT. Degradation of Rubber Solutions	VII, 632
Degradation of Rubber Solutions of Different Concentrations	V, 121
Influence of Oxygen on the Degradation of Rubber Solutions	VI, 111
Law of Degradation of Rubber Solutions as a Function of the Time at Different Temperatures	IV, 505
Limiting Degradation of Rubber Solutions	VI, 376
——, AND ERNST A. HAUSER. Researches on the Structure of Rubber	I, 401
BASHORE, H. H. A New Rebound Resiliometer	X, 820
BASSETT, H. LL., AND H. G. WILLIAMS. The Production of Isoprene from Rubber	VI, 232
BEAL, C. L. Anode Process for Rubber Articles and Coatings	VI, 537
BEAVER, D. J., AND T. P. KELLER. Effect of Various Types of Carbon Black on Certain Physical Properties of Rubber Compounds	I, 458

	Volume and Page
——, AND J. W. MACKAY. Reënforcing Action of Pigment Mixtures on Rubber Compounds	IV, 248
BEAVER, D. J. *See also* Booth, E. W.; Plummer, W. B.	
BEHRE, J. Mastication of Rubber	VIII, 388
Measurement of the Plasticity of Rubber. A Reply to Dillon and Johnston	IX, 266
Plasticity Measurements in the Rubber Industry	VI, 244
Vulcanization of Rubber	VII, 8
BEKKEDAHL, NORMAN. Forms of Rubber as Indicated by Temperature-Volume Relationship	VIII, 5
See also McPherson, Archibald, T.	
——, AND HARRY MATHESON. Heat Capacity, Entropy, and Free Energy of Rubber Hydrocarbon	IX, 264
——, LAWRENCE A. WOOD, AND MIECZYSLAW WOJCIECHOWSKI. Some Physical Properties of Isoprene	X, 451
BERCHET, GERARD J. *See* Carothers, Wallace H.	
BEUMÉE-NIEUWLAND (MRS.) N. The Coagulation of Hevea Latex	I, 353
BEVERDAM, H. B. *See* van Rossem, A.	
BIERER, J. M., AND C. C. DAVIS. Relation between Artificial Aging Tests and Natural Aging	III, 144
Specifications for Rubber Goods and the Value of Performance Tests	I, 146
BIRCH, STANLEY FRANCIS. Preparation of Butadiene	I, 208
BISHOP, R. O. *See* Eaton, B. J.; Rhodes, E.	
——, AND R. G. FULLERTON. Variations in Plantation Sheet Rubber	V, 509
——, AND RHODES, E. Effect of Simple Carbohydrates on the Vulcanization of Rubber	V, 636
BISHOP, W. S. *See* Kemp, A. R.	
BIXBY, W. F., AND E. A. HAUSER. Transparency of Rubber Compounds Containing Magnesium Carbonate	X, 299
BLAKE, JOHN T. Adsorption of Stearic Acid by Carbon	II, 633
Reënforcement of Rubber by Fillers	II, 21
Studies in the Vulcanization of Rubber. Part 1. Thermochemistry of Vulcanization of Rubber	III, 631
Part 2. Vulcanization of Rubber with Nitro Compounds	III, 639
Part 3. Kinetics of Vulcanization of Rubber with Sulfur and Selenium	III, 650
Part 6. Thermochemistry	VIII, 112
See also Boggs, C. R.	
——, AND PHILIP L. BRUCE. Studies in the Vulcanization of Rubber. Part 7. Unsaturation of Rubber Vulcanized with Nitro Compounds and Benzoyl Peroxide	X, 735
BLOOMFIELD, G. F., AND E. H. FARMER. Action of Hypochlorous Acid on Rubber	VII, 327
Preparation of Chlorinated Rubbers from Latex. Hypochlorination and Chlorination Processes	VII, 320
Research on Modified Rubbers.	
III. Adhesive Latex	VII, 450
(*a*) Preparation of Sticky Latex.	
(*b*) Characteristics of and Tests on Sticky Latex.	
IV. The Oxidation of Rubber with Aqueous Hydrogen Peroxide-Acetic Acid Mixtures	VII, 454
VI. Oxidation of Rubber Solutions with Gaseous Oxygen in Presence of Catalysts	VIII, 335
——, E. H. FARMER, AND C. H. MILLER. Research on Modified Rubbers.	
VII (Appendix) Composition of Some Chlorinated Rubbers	VIII, 622
BLOW, C. M. An Investigation of the Viscosity of Rubber Solutions	III, 604
See also Garner, T. L.; Stamberger, P.	
BLOW, C. M., AND T. L. GARNER. Fatty Acid Softeners in Rubber Compounding	VIII, 571
——, AND P. STAMBERGER. Influence of the Amount of the Surplus Liquid on the Swelling Maximum of Rubber Jellies	IV, 64
BODGER, WALTER H. Porosity in Vulcanized Rubber	IX, 95
——, AND F. H. COTTON Reinforcing Action and Other Properties of Titanium Fillers in Rubber Stocks	VI, 106
BOGGS, C. R. Adsorption of Stearic Acid by Carbon. Discussion	II, 636
See also WIEGAND, W. B.	
——, AND J. T. BLAKE. Deproteinized Rubber	X, 288
Studies in the Vulcanization of Rubber. Part 4. A Theory of Vulcanization of Rubber	III, 659
BOIRY, F. The Effect of Pigments in Rubber	V, 326
BOLOTNIKOV, V., AND V. GUROVA. Determination of Free Sulfur in Rubber. 1. Iodometric Method of Determination of Free Sulfur	VIII, 87
BOND, W. *See* Healy, A.	
BONDY, H. F. Influence of Certain Colored Substances on the Autoöxidation of Balata and of Rubber	VIII, 239
——, (IN COLLABORATION WITH G. G. LAUER). The Antioxidants of Rubber Latex. 1.	VII, 23
See also Staudinger, H.	
BOOTH, E. W. Heat-Resisting Inner Tube Stocks	V, 409
——, AND D. J. BEAVER. Air-Bomb Aging Test for Tread Compounds	X, 371
BOSTRÖM, SIEGFRIED. Contribution to the Thermochemistry of Rubber	II, 259
BOURBON, A. Vulcanization of Rubber in Concentrated Solution in the Presence of Ultra-Accelerators	V, 630
BRAENDLE, H. A. *See* Cranor, D. F.	
BRASS, P. D. *See* Jordan, H. F.	
BRAUN, MILTON L. Preliminary Study of the After-Effect or Drift in Rubber under Constant Load	X, 224
See also Pummerer, R.	
BRIDGWATER, E. R. Comparison of Rate of Combination of Sulfur with Rubber and Rate of Vulcanization	II, 209
Physical Properties of DuPrene Compounds	VII, 406
Technical Application of Antioxidants	II, 243

	Volume and Page
——, AND E. H. KRISMANN. Factors Affecting Rate of Vulcanization of Chloroprene Plastic Polymers	VI, 309
BRITTAIN, C. L. Chart for the Estimation of Equivalent Cures	II, 471
BROOKS, A. E. *See* Shinkle, S. D.	
BROUS, S. L., AND W. L. SEMON. Koroseal, a New Plastic	VIII, 641
BROWN, ROY W. Essentials for Accurate Gauging for Compressible Material	II, 539
BRUCE, PHILIP L. *See* Blake, John T.	
BRUNI, G. Minimum of Sulfur Required for Vulcanization. A Résumé	V, 295
——, AND E. GEIGER. New Derivatives of Rubber	I, 177
——, AND G. NATTA. Structure of Gutta-Percha Based on Studies with Electron Rays	VII, 603
Structure of Unstretched Rubber Based on Studies with Electron Rays	VIII, 1
BRUNNER, M. *See* Staudinger, H.	
BUCHAN, S. Mastication and Rate of Set-Up. 1	X, 508
BUDILOFF, N. Electro-Deposition of Rubber from Revertex and Revultex	VI, 422
BUIKO, G. N. *See* Fabritziev, B. V.	
BUIZOV, B. V., V. S. MOLODENSKIĬ, AND N. I. MIKHAĬLOV. Action of Copper Salts on Raw Rubber	VII, 618
Chlorination of Disaggregated Rubber	VIII, 371
——, AND M. K. POPOVA. Influence of the Gaseous Medium on Hot Vulcanization	VIII, 437
BUNBURY, H. M. *See* Naunton, W. J. S.	
BUSENBURG, E. R. *See* Winkelmann, H. A.	
BUSSE, W. F. Mastication of Rubber. An Oxidation Process	V, 164
Physical Structure of Elastic Colloids	VII, 273
Tear-Resistance and Structure of Rubber	VIII, 122
——, AND W. B. DOGGETT. Application of the Falling Cylinder to the Measurement of the Viscosity of Thick Rubber Cements	III, 701
CADWELL, SIDNEY M. Correlation of Various Aging Tests with Natural Shelf-Aging	III, 169
See also Temple, J. W.	
CADY, G. H. *See* Shinkle, S. D.	
CALDWELL, M. L. *See* Spence, D.	
CAMERON, FRANK K. *See* Johnson, Bernard L.	
CAROTHERS, WALLACE, H., GERARD J. BERCHET, AND ARNOLD M. COLLINS. Acetylene Polymers and Their Derivatives. III. The Addition of Hydrogen Chloride to Vinylacetylene	VI, 121
——, AND DONALD COFFMAN. Homologs of Chloroprene and Their Polymers. (Second paper on new synthetic rubbers)	VI, 115
——, JAMES E. KIRBY, AND ARNOLD M. COLLINS. Acetylene Polymers and Their Derivatives. V. The Polymerization of Bromoprene. (Third paper on new synthetic rubbers)	VI, 317
——, IRA WILLIAMS, ARNOLD M. COLLINS, AND JAMES E. KIRBY. Acetylene Polymers and Their Derivatives. II. A New Synthetic Rubber: Chloroprene and Its Polymers	V, 7
CARPENTER, ARTHUR W. Measurement of Quality in Rubber Goods by Physical Tests	VII, 700
CARSON, C. M. Determination of Total Moisture in Carbon Blacks	III, 340
Effect of Storage on Milled Crude Rubber	IV, 417
See also Park, C. R.	
——, AND L. B. SEBRELL. Some Observations on Carbon Black	III, 111
CARTLIDGE, R. E., AND H. L. SNYDER. Effect of High *vs.* Low Sulfur in Vulcanizing Reclaim	I, 70
CASSIE, A. B. D., MALDWYN JONES, AND W. J. S. NAUNTON. Fatigue in Rubber. Part I	X, 29
CASTIGLIONI, A. Volumetric Determination of Free Sulfur	VI, 412
CAWLEY, C. M., AND J. G. KING. Hydrogenation-Cracking of Rubber	VIII, 360
CHÉNEVEAU, C. Law of Absorption of Carbon Dioxide by Rubber as a Function of the Time	V, 604
CHERASKOVA, E. *See* Kheraskova, E.	
CHITTENDEN, F. D. *See* Fisher, Harry L.	
CHURCH, H. F., AND H. A. DAYNES. Properties of Hard Rubber. I. Plastic Deformation	X, 64
III. Study of Surface Resistivity as Affected by Exposure to Light, Air, and Humidity	X, 532
CLAPSON, W. J. *See* Sheppard, J. R.	
CLARK, GEORGE L. *See* Stillwell, Charles W.	
CLARK, GEORGE L. Rubber as It Is Revealed by X-Rays	II, 225
X-Ray Contributions to the Problem of Polymerization	II, 285
——, AND KENNETH E. CORRIGAN. Long Spacings of Rubber and Cellulose	IV, 213
——, W. J. WARREN, and W. H. SMITH. X-Ray Diffraction Studies of the Bureau of Standards Rubber Fractions	VII, 503
CLIFFORD, A. M. *See* Thies, H. R.	
CLINE, DELBERT C. *See* Sheen, Robert T.	
COFFMAN, DONALD. *See* Carothers, Wallace.	
COLLINS, ARNOLD M. *See* Carothers, Wallace.	
COMES, D. A. Hot *vs.* Cold Breakdown of Rubber	X, 195
CONANT, J. B., AND C. O. TONGBERG. Polymerization Reactions Under High Pressure. I. Some Experiments with Isoprene and Butyraldehyde	III, 472
CONOVER, F. S. Effect of Pigmentation on the Work of Retraction of Rubber Compounds	III, 764
Practical Method for Obtaining Dry Air for Humidity Control in a Rubber Laboratory	II, 318
COOPER, L. V. Laboratory Evaluation of Flex-Cracking Resistance	IV, 134
New Machine for Laboratory Evaluation of Fatigue of Rubber Compounds Flexed Under Compression	VII, 125
See also Zimmerman, Earle C.	
COPE, W. H. *See* Somerville, A. A.	
CORBET, ALEXANDER STEVEN. Natural Coagulation of Hevea Latex	III, 254

	Volume and Page
CORRIGAN, KENNETH E. *See* Clark, George L.	
COSLER, V. A. The Abrasion Question. Some Factors in the Deterioration of Rubber when Exposed to Frictional Contacts with Other Materials	VI, 345
COTTON, F. HARRISS. Determination of the Color of Latex	IX, 132
Lipin from Latex	V, 365
Mastication. A Preliminary Study	V, 153
See also Barron, H., Bodger, W. H., Boiry, F., Gibbons, P. A., Lefcaditis, G.	
COULANGEON, H. Technical Note on the Use of Certain Solvents in Solutions	IV, 361
COUSINS, EDWARD. *See* McCarty, J. E.	
COX, L. B., AND C. R. PARK. Carbon Blacks and Their Use in Rubber. III. Aging Effect	I, 475
CRAIG, DAVID. Determination of Diarylamines in Rubber Compositions	X, 383
See also Jones, Paul C.; Semon, W. L.	
CRANOR, D. F., AND H. A. BRAENDLE. Evaluation of Carbon Blacks	II, 237
CRAWFORD, RICHARD A. Selection and Use of Age-Resistors in Rubber Compounds	VII, 663
CRAWFORD, R. D. Electric Motor Drives for Rubber Machinery	II, 528
CRAYTOR, M. W. *See* Oldham, E. W.	
CRISP, P. P. Open Mill Mixing *vs.* Internal Mixers	I, 380
CROAKMAN, E. G. *See* Winkelmann, H. A.	
CROZIER, ROBERT NELSON. *See* Whitby, G. Stafford.	
CUMMINGS, A. D. Influence of Temperature on the Evolution of Hydrogen Sulfide from Vulcanized Rubber	VI, 46
See also Jessup, R. S.; McPherson, Archibald T.	
——, AND L. B. SEBRELL. Some Observations on Rubbers with Low Nitrogen Content.	II, 431
——, AND H. E. SIMMONS. Inaccuracies in Determination of Acidity of Raw Rubber by Water Extraction	II, 56
Some Observations with Ultra-Accelerators	II, 59
CURRAN, H. A., AND T. R. DAWSON. "Colloidal" Zinc Oxide	X, 309
CURTIS, HARVEY L., AND ARNOLD H. SCOTT. Change of Electrical Properties of Rubber and Gutta-Percha During Storage Under Water	IV, 39
See also Scott, A. H.	
CUTLER, DAVID ROY. Kaysam. A Casting Process for the Manufacture of Rubber Products from Latex	X, 352
DANIEL, F. K., H. FREUNDLICH, AND K. SÖLLNER. Stability of Abiarana Gutta-Percha Latex	X, 272
DAVEY, W. CECIL. Studies in the Oxidation of Rubber Mixings	II, 571; III, 563
Oxidation of Rubber at Atmospheric Temperatures	IV, 229
——, AND T. OHYA. Permeability of Rubber Mixings	III, 96
DAVEY, WHEELER P. *See* Acken, Marshall F.; Long, John D.	
DAVEY, W. S. INFLUENCE OF RUBBER "RESINS" in Zinc Oxide-Accelerator Mixings	IV, 156
See also Martin, G.	
DAVIES, B. L. Accelerators in Hard Rubber	VIII, 75
Secondary Changes During Vulcanization of Ebonite. Part 1	X, 516
Stress-Strain Relationship in Ebonite	VII, 197
DAVIES, J. M. *See* Dieterich, E. O.; Karrer, E.	
DAVIES, O. L., AND S. HORROBIN. Errors in Tensile Strength Testing	X, 180
DAVIES, R. C. Some Observations on Accelerator Practice and Modern Compounding	VII, 641
DAVIS, C. C. *See* Bierer, J. M.	
DAWSON, T. R. *See* Curran, H. A.	
DAYNES, H. A. Absorption and Diffusion of Water in Rubber	X, 660
Internal Heating of Ebonite During Vulcanization	IX, 444
Measurement of Water Absorption by Rubber	VI, 24
See also Church, H. F.	
DEAN, J. N. Heat Treatment and Polymorphism of Gutta-Percha and Balata	VI, 76
DEFRANCE, M. J., AND W. J. KRANTZ. Value of Softeners in Tread Stock	IV, 560
DEKKER, P. Contributions to the Analysis of Rubber. I. The Determination of the Water-Soluble Components in Rubber	X, 574
II. Qualitative Determination of the Serum Components of Raw Rubber and of Vulcanized Rubber	X, 716
See also van Rossem, A.	
DELLER, ANTHONY WILLIAM. Principles of Patent Law Involved in the Weiss Patent Litigation	II, 93
DEPEW, HARLAN A. Influence of Pigments on Some Physical Properties of Unvulcanized Rubber	III, 87
Mechanism of the Reinforcement of Rubber by Pigments	II, 216
Reactions During Vulcanization. II. Reactions between Zinc Soaps and Mercaptobenzothiazole	V, 384
Zinc Oxide in Rubber. I. Chemical and Physical Properties of Zinc Oxide and Their Relation to Rubber-Making Properties	VI, 549
II. Choice and Testing of Zinc Oxide for Rubber Compounding	VI, 559
See also Jones, H. C.; McKee, Ralph H.	
——, AND H. C. JONES. Laboratory Flexing Tests as an Aid in Investigating the Pneumatic Tire Carcass	III, 544
DERIEUX, J. B. Coefficient of Friction of Rubber	VIII, 441
DE VRIES, O. Plasticity Determinations in Crude Rubber	I, 291
Specific Gravity of Rubber in Latex	VIII, 443
——, AND R. RIEBL. Tensile Strength of Java Plantation Rubber	III, 350
DEWALD, R. H. *See* Waterman, H. I.	
DIETERICH, E. O. Estimation of the Degree of Penetration of Rubber into Fabrics	III, 328
Some Practical Methods of Measuring Gauge at the Calenders	II, 531
Time and Temperature-Plasticity Relations for Crude Rubber as Measured with the Goodrich Plastometer	II, 607
See also Hahn, S. H.; Karrer, E. O.	

Volume and Page

——, AND J. M. DAVIES. Scorching, and Other Plasticity Changes in Rubber Compounds on Heating ..... IV, 552
DILLON, J. H. An Impact-Cutting Test for Tire Tread Stocks ..... IX, 520
Rubber Plasticity Control. Significance and Value of Recovery Measurement of Williams Plastometer ..... VII, 718
A Simplified Extrusion Plastometer for Unvulcanized Rubber ..... IX, 496
——, AND N. JOHNSTON. Plastic Properties of Several Types of Unvulcanized Rubber Stocks at High Rates of Shear ..... VII, 248
Remarks on the Measurement of the Plasticity of Rubber ..... VIII, 55
DINSMORE, R. P. Laboratory Rubber Testing. Its Relation to Service ..... V, 692
Some Practical Aspects of Rubber Evaluation ..... II, 406
Stearic and Oleic Acids as Rubber-Compounding Ingredients ..... II, 619
——, AND W. W. VOGT. A Scheme for Accelerator Classification ..... I, 410
DITMAR, RUDOLF, AND CARL HEINZ PREUSSE. Overflow During Vulcanization. Its Dependence on Inactive and Active Fillers, and Errors in Previous Calculations of the Specific Gravity of Vulcanizates Resulting from It ..... IV, 24
DOGADKIN, B., AND W. BALANDINA. Investigation of the Aging Processes of Rubber. II. The Gold Reaction of Products of the Initial State of Oxidation ..... VII, 18
——, AND M. LAWRENENKO. State of Rubber in Solutions. II. The Effect of Temperature on the Viscosity of Solutions of Various Concentrations ..... VI, 436
——, AND J. MARGOLINA. Effect of Surface-Active Substances and Electrolytes on the Crystallization of Sulfur from Rubber Solutions ..... VIII, 250, 499
——, G. PANTSCHENKOV. Investigation of the Aging Processes in Rubber. I. The Effect of Irradiation with Ultra-violet Light on the Surface Tension of Rubber Solutions ..... VII, 302
State of Rubber in Solutions, Based on the Surface Properties of the Solutions ..... V, 249
——, AND D. PEWSNER. Structure-Viscosity of Rubber Solutions ..... IV, 345
——, AND D. SANDOMIRSKY. Electro-Deposition of Rubber on a Zinc Anode ..... VII, 314
DOGGETT, W. B. *See* Busse, W. F.
DOLGOPOL'SKIĬ, I. M. *See* Klebanskiĭ, A. L.
DONALD, M. B. *See* Stevens, H. P.
DRAKELEY, T. J. *See* Skinner, S. J.
DRISCH, NICOLAS. *See* Dufraisse, Charles.
DUFRAISSE, CHARLES. Problem of Changes in Rubber Brought About by Atmospheric Oxygen ..... VI, 157, 566
Part I. General Review of the Tendency of Rubber to Oxidize ..... VI, 158
Part II. The Modes of Action of Oxygen ..... VI, 168
Part III. Oxidation from the Technical Standpoint ..... VI, 182
See also Moureu, Charles.
——, AND NICOLAS DRISCH. Experiments on the Autoöxidation of Rubber and Catalytic Phenomena Which Are Associated with It ..... V, 301
Applications to Rubber of the Concept of Antioxygens and Proöxygens. The Case of Litharge ..... V, 318
——, NICOLAS DRISCH, AND (MME.) DENISE PRADIER-GIBELLO. The Problem Whether Litharge is an Antioxygen or a Proöxygen toward Rubber. The Practical Consequences ..... VII, 167
——, AND ROGER VIEILLEFOSSE. Influence of Mastication on the Oxido-Aging of Rubber. A Comparison with the Influence of Heating ..... IX, 206
The Proöxygenic Role of Iron in the Oxidizability of Rubber ..... VII, 213

EASLEY, M. K., AND A. C. EIDE. Effect of Cadmium Compounds on Typical Organic Accelerators during Vulcanization ..... V, 393
EATON, B. J., E. RHODES, AND R. O. BISHOP. Observations on the Effect on Vulcanization of the Lipin of Hevea Latex ..... IV, 339
EBERMAYER, GEORGE. *See* Pummerer, R.
ECCLES, J. C., AND J. H. C. THOMPSON. Investigation of the Visco-elastic Properties of Rubber ..... VIII, 177
EDLAND, L. A. *See* Somerville, A. A.
EIDE, A. C. *See* Easley, M. K.
ELLIOTT, L. E. *See* Martin, G.
ENDÔ, HIDEMARO. Studies on the Acetone Extraction of Raw Rubber.
I. The Effect of the Time of Heating of the Alcohol Solution on the Determination of the Acid Value of Raw Rubber and Its Acetone Extract ..... VIII, 604
II. Influence of Heating at 100° C. and Storing of the Acetone Extract on its Acid Value ..... VIII, 605
III. Effect of the Time of Acetone Extraction of Raw Rubber on the Acid Value of the Acetone Extract and of the Acetone-Extracted Residue ..... VIII, 607
IV. Relation between the Time of Saponification and Saponification Value of Raw Rubber and Its Acetone Extract ..... VIII, 610
V. Influence of Heating at 100° C. and Storage of the Acetone Extract on the Saponification Value ..... IX, 35
VII. Time of Acetone Extraction of Raw Rubber and the Saponification Value of the Acetone Extract and Residue ..... IX, 308
ERMOLENKO, N., AND S. LEVINA. Swelling Capacity of Rubber in Mixtures of Solvents in Relation to Their Dielectric Polarizations ..... X, 105
ESTELOW, R. K. *See* Amon, F. H.
EVERS, F. Swelling of Latex ..... III, 361; VII, 477
EVERTS, W. W. C. Influence of Time on the Elongation of Soft Rubber Under Constant Load ..... VI, 520
EYMERS, (MISS J. G.). *See* Ornstein, L. S.; van Geel, W. C.

FABRITZIEV, B. V., G. N. BUĬKO, AND E. A. PAKHOMOVA. Rubber Solvents and Substances Which Lower the Viscosity of Rubber Cements ..... IX, 428
Self-Vulcanizing Cements ..... IX, 38

	Volume and Page
FAÏNBERG, B. Determination of Free Sulfur by Titration	IX, 318
FAIRCLOTH, A. T. *See* Wren, W. G.	
FARBEROV, M. I., AND YU. MARGOLINA. Thermal Plasticization of rubber. I. Structural Changes in Thermally Plasticized Rubber	IX, 227
——, AND A. V. SUSLIAKOV. Thermal Plasticization of Rubber. II. Technical Characteristics of Softened Rubber	IX, 240
FARMER, E. H. *See* Bloomfield, G. F.	
FEISST, W. *See* Staudinger, H.	
FERGUSON, LAWRENCE. *See* Schumacher, Earle E.	
FERRI, CESARE. *See* Meyer, Kurt H.	
FERRY, J. D. *See* Spence, D.	
FICQUELMONT, ARMAND MARIE DE. Constitution of Inorganic Rubber	X, 465
FIELD, J. E. *See* Gehman, S. D.	
FIELDING, J. H. Impact Resilience in the Testing of Channel Black	X, 807
FIKENTSCHER, H. AND H. MARK. A Spiral Model of Rubber	III, 201
FISHER, HARRY L. Conversion of Rubber into Thermoplastic Products with Properties Similar to Gutta-Percha, Balata, and Shellac. I. Methods of Preparation and General Properties	I, 1
——, AND F. D. CHITTENDEN. 3-Methyl-1,3-Pentadiene	III, 626
——, AND A. E. GRAY. Chemical Unsaturation of Rubbers Vulcanized with Polynitro Compounds and Benzoyl Peroxide, and Its Possible Bearing on Vulcanization	I, 101
——, AND EUGENE M. MCCOLM. Conversion of Rubber into Thermoplastic Products with Properties Similar to Gutta-Percha, Balata, and Shellac. II. Chemistry of the Reaction	I, 11
——, AND Y. SCHUBERT. Hard Rubber. Its Carbon and Hydrogen Content	IX, 350
FLEURENT, EMILE. *See* Bary, Paul.	
FLINT, C. F., AND W. J. S. NAUNTON. Physical Testing of Latex Films	X, 584
FOL, J. G., AND W. DE VISSER. Latex Contaminated with Copper Compounds as a Source of Danger of Fire	I, 288
FOLLANSBEE, EVERETT M. Accelerated Aging *vs.* Shelf Aging	III, 156
FORD, T. FOSTER. Nonsolvents in Rubber Cements	X, 186
FOWLER, D. E. Examination of Rubber Latex and Latex Compounds. II. Chemical Testing Methods	X, 361
FRERI, CESARE. *See* Meyer, Kurt H.	
FREUNDLICH, H. Thixotropy and Plasticity in the Rubber Industry	IX, 64
See also Daniel, F. K.	
——, AND N. TALALAY. The Autoöxidation of Rubber Latex	VI, 378
FRITZ, H. E., AND J. R. HOOVER. Chemical Resistance of Rubber as an Engineering Material	VI, 1
FROMANDI, GUIDO. Chemical Adsorption Studies of Rubber Fillers and Rubber Compounds. Part 1	III, 229
Isomerization of Rubber to Cyclorubber under the Influence of High Tension Alternating Currents	II, 161
Viscosity of Rubber Solutions under Influence of Benzoyl Peroxide	IV, 8
See also Hock, Lothar.	
FRUMKIN, L., AND V. MARGARITOV. Shock-Absorbing Quality of Rubber	VIII, 528
FRY, J. D., AND B. D. PORRITT. Effect of Heat on Raw Rubber in the Presence and Absence of Air	I, 299
FUJIHARA, TAKEO. Studies on Rubber in Solution.	
I. Studies on the Aging of Rubber Solutions	V, 618
II. Structural Viscosity of Rubber Solutions	V, 621
III. Rubber Solutions	V, 624
FUJITA, HIRONOSUKE. *See* Tanaka, Yoshio.	
FUJIWARA, TAKEO, AND TOSHEO NAMIKI. Heat Treatment of Vulcanized Rubber	VI, 225
——, AND TORAMATSU TANAKA. Characteristic Properties of Rubber at Low Temperatures. A Discussion of the Stress-Strain Curves of Vulcanized Rubber at Low Temperatures	VII, 610
FUKAYA, KOICHI. *See* Hada, Kyoichi.	
FUKUNAGA, KENJI. *See* Toyabe, Yutaka.	
FULLER, C. S. Gutta-Percha. Effect of Vulcanization on Its X-Ray Diagram	X, 137
FULLER, E. W. Effect of Stearic Acid on Various Crude Rubbers	II, 611
FULLERTON, R. G. Notes on Defects in Smoked Sheet and Crepe Rubber	III, 264
Observations on the Coagulation of Hevea Latex	IV, 310
See also Bishop, R. O.	
FURIHATA. *See* Kobayashi, Ryônosuke.	
GALLAY, WILFRED. Structural Viscosity in Some Lyophilic Sols. II. Rubber Sols	VI, 371
GARBSCH, P., AND G. VON SUSICH. Roentgenographic Examination of μ-Polychloroprene $(CH_2{:}CClCH{:}CH_2)_x$	VI, 113
GARNER, T. L. Alternating Behavior of Fatty Acids in Rubber Compounds	III, 612
Factors in the Works Control of Plasticity by the Williams Method	III, 293
Tackiness of Unvulcanized Rubber	II, 384
See also Blow, C. M.	
——, AND C. M. BLOW. Plasticization of Rubber	IX, 426
GARVEY, B. S., JR. Chemistry of Soft Rubber Vulcanization. III. Comparison of Vulcanized Rubber with Unmilled Crude Rubber, Reclaims, and Unvulcanized Stocks Containing Stiffeners or Gas Black	VII, 538
IV. Vulcanizing Agents Other than Sulfur	VII, 688
V. Treatment of Dilute Rubber Cements with Sulfur Chloride	X, 255
——, AND W. D. WHITE. Chemistry of Soft Rubber Vulcanization.	
I. Measurement of Vulcanization	VII, 89
GEHMAN, S. D. Raman Spectrum of Rubber	VIII, 521
——, AND J. E. FIELD. Colloidal Structure of Rubber in Solution	X, 643

Volume and Page

———, AND T. C. MORRIS. Measurement of Average Particle Size of Fine Pigments..... V, 202
———, AND H. J. OSTERHOF. Raman Spectrum of Rubber and Some Related Hydrocarbons..... IX, 275
———, AND J. S. WARD. Microturbidimeter for Determination of Rubber Content of Latex. IV, 601
GEIGER, E. *See* Bruni, G.; Staudinger, H.
GERKE, ROSCOE H. Thermodynamics of Stressed Vulcanized Rubber..... III, 304
See also Gibbons, W. A.; Rainier, E. T.
GERLACH, KARL. *See* Pummerer, R.
GIBBONS, P. A. Semi-Ebonite. I..... VIII, 554
———, AND F. H. COTTON. Semi-Ebonite. Part 2..... IX, 468
GIBBONS, W. A. Flexing Test for Tire Carcass Stocks..... III, 333
———, R. H. GERKE, AND H. C. TINGEY. T-50 Test for State of Cure..... VI, 525
GIBSON, R. E. *See* Adams, L. H.
GOODWIN, NORRIS, AND C. R. PARK. Carbon Blacks and Their Use in Rubber. I. Comparative Properties of Blacks and Tests in Uncured Rubber..... I, 240
II. Experiments in Cured Rubber..... I, 257
GORGAS, ADOLF. Determination of the Iodine Number of Raw Rubber..... II, 362
GRAY, A. E. *See* Fisher, Harry L.; Ingmanson, J. H.
GRAY, HAROLD. Comments [on Rubber Production]..... IX, 165
Protective Paint from Rubber..... I, 89
GREENUP, H. W. Rate of Deposition of Latex on Porous Molds..... IV, 437
See also Morris, V. N.
———, AND L. E. OLCOTT. Latex Battery Separators. Preparation and Properties..... X, 346
GRENQUIST, E. A. Dispersion of Gas Black and the Physical Properties of Rubber Mixtures. IV, 29
Dispersion of Pigments in Rubber..... I, 441
Dispersion of Pigments in Rubber. Part 2..... II, 656
Structural Changes During the Processing of Rubber..... III, 716
GRIFFITH, T. R. Mathematical Treatment of a Theory of Rubber Structure..... VIII, 23
GRUZEVICH. *See* Gusev, N.
GÜNDEL, WOLFGANG. *See* Pummerer, R.
GUPPY, W. D. Determination of Free Sulfur in Soft Vulcanized Rubber by a Volumetric Method..... V, 360
Determination of Free Sulfur by a Volumetric Method. Part 2..... VI, 512
GUROVA, V. *See* Bolotnikov.
GUSEV, N., GRUZEVICH, KHOVRINA, AND TZELIKOV. Thermal Plasticization of Rubber... IX, 250

HADA, KYOICHI, AND TOKEJI NAKAJIMA. Studies on the Thermochemistry of the Vulcanization of Rubber. VII. Heating Curves for the Vulcanization of the System: Raw Rubber–Sulfur (2)..... VI, 56
———, AND KOICHI FUKAYA. Studies on the Thermochemistry of Rubber. I. Heat of Vulcanization of Rubber..... IV, 507
HAHN, S. H., AND E. O. DIETERICH. Graphical Tensile-Testing Machine for Rubber Threads..... IV, 456
HARMAN, M. W. Vulcanization Characteristics of Mercaptobenzothiazole Derivatives.. X, 329
HARTNER, FRITZ. Surface Energy between Rubber and Fillers..... III, 215
HASLAM, G. S. Effect of Particle Size of Zinc Oxide on the Physical Properties of Rubber. VI, 288
HASTINGS, J. D. Effect of the Conditions of Drying on the Aging Properties of Sheet Rubber. Part 1..... IX, 545
———, AND E. RHODES. Note on the Deterioration of Raw Rubber by Manganese Contamination..... IX, 143
HAUSER, E. A. Rubber-Structure Research and Its Bearing on the Elastic Properties of Colloids in General..... II, 301
Micromanipulations of Latex in the Dark Field..... IV, 219
See also Bary, Paul; Bixby, W. F.
———, AND M. HÜNEMÖRDER. Contribution to the Problem of the Impregnability of Cord Threads with Rubber..... V, 685
Structural Differences in Masticated and Unmasticated Raw Rubber Mixtures and Vulcanizates and Their Significance from a Practical Point of View..... III, 35
HAUSHALTER, F. L. Recovering Lead in Rubber Factory..... III, 470
———, WEBSTER, N. JONES, AND J. W. SCHADE. Effects of Ozone on Stretched Rubber.. I, 120
HAVENHILL, R. S. Heat Generation and Anisotropy of Rubber Compounds in the Flexometer..... IX, 608
HAYDEN, O. M. Testing of Rubber and Rubber-Like Materials for Oil-Resistance..... VII, 657
———, AND E. H. KRISMANN. Effect of Oils and Chemicals on DuPrene Compounds..... VII, 393
HEALEY, A., AND W. BOND. Pneumatic Tire in Heavy Transport..... III, 271
HEATON, NOEL. *See* Stevens, H. P.
HENCKY, H. Elastic Behavior of Vulcanized Rubber..... VI, 217
HENNE, ALBERT L. *See* Midgley, Thomas, Jr.
HERRMANN, D. B. Diffusion of Water Through Organic Insulating Materials..... VIII, 297
HESSELS, J. H. E. *See* Rossem, A. van.
HILBERT, GUIDO E. *See* Howard, Louis B.
HIRAKAWA, KENJI. *See* Tanaka, Yoshio.
HOCK, LOTHAR. Thermodynamic Theory of Rubber Fillers..... II, 275
———, AND GUIDO FROMANDI. Observations on the Chemical Constitution and Physical Properties of Rubber..... II, 365
———, AND HANS SCHMIDT. Formation of Sulfur from Hydrogen Sulfide and Sulfur Dioxide. A Contribution to the Vulcanization Process of Peachey..... VII, 637
Heat of Swelling of Rubber and Its Relation to the Previous History of the Rubber and to the Nature of the Swelling Agent..... VII, 462
HOEKSTRA, J. Balance-Plastometer: A Simple Instrument for Measuring Plasticity and Recovery of Soft Materials..... VII, 136
Plasticity and Elasticity, with Special Reference to Unvulcanized Rubber..... IX, 55
HOHENEMSER, W. *See* Meyer, Kurt H.

	Volume and Page
HOLMBERG, BROR. Rubber and Thioglycolic Acid	VI, 71
HOLT, W. L. Behavior of Rubber under Repeated Stresses	V, 79
See also Smith, W. Harold.	
——, AND ARCHIBALD T. MCPHERSON. Change of Volume of Rubber on Stretching: Effects of Time, Elongation, and Temperature	X, 412
Water Bath Having Submerged Individual Sample-Containers for the Accelerated Aging of Rubber in Air	VIII, 302
HOOVER, J. R. *See* Fritz, H. E.	
——, AND H. C. KLEIN. Rubber-Lined Equipment. Fundamental Principles of Design	X, 564
HOPFF, H., AND G. VON SUSICH. Study of Gutta-Percha and Balata by Means of X-Ray Spectra	IV, 75
HORIE, HUKIO, AND KIKUO MORIKAWA. Heat Changes in the Vulcanization of Rubber. I. Qualitative Tests on a Comparative Basis	VIII, 514
HORROBIN, S. *See* Davies, O. L.	
HOWARD, LOUIS B., AND GUIDO E. HILBERT. Concerning the Alleged Absorption of Gaseous Nitrogen by Benzene Solutions of Rubber and Gutta-Percha Hydrocarbon	X, 254
HOWEY, J. H. Hard Spots in Vulcanized Rubber Compounds	IV, 256
HUBER, E. *See* Staudinger, H.	
HUMPHREY, BINGHAM J. Determination of Guanidines in Rubber Stocks and Consumption of Guanidines During Cure	IX, 661
HÜNEMÖRDER, M. *See* Hauser, E. A.	
HURLSTON, E. H. Use of Factice in Rubber Manufacture	IX, 621
IGUCHI, MORIHIRO, AND FRITZ SCHOSSBERGER. Roentgenographic Investigations of Stretched Vulcanized Rubber	X, 121
INGMANSON, J. H., AND GRAY, A. N. Some Studies Relating to the Compression and Shear-Resistance of Rubber	III, 523
——, AND A. R. KEMP. Soft Vulcanized Rubber. Effect of Temperature and Oxygen Pressure on Aging Rate	X, 336
See also Kemp, A. R.	
ISHIGURO, KATSUMI. Experiments on Oil-Proof Rubber	VI, 278
See also Saito, Shohei.	
JENNINGS, H. K. Sources and Application of Cooling Water	I, 367
JESSUP, R. S., AND A. D. CUMMINGS. Heats of Combustion of Rubber and of Rubber-Sulfur Compounds	VIII, 44
JOHNSON, BERNARD L., AND FRANK K. CAMERON. Mechanism of Rubber Aging	VII, 387
JOHNSON, C. R. Carbon Black. I. A Study of Its Volatile Constituents	I, 485
II. The Role of Oxygen	III, 122
JOHNSTON, N. *See* Dillon, J. H.	
JONES, F. A. *See* Twiss, D. F.	
JONES, F. B. Estate Practice and Its Relation to Factory Requirements	VII, 1
JONES, H. C. Reactions During Vulcanization. III. The Multiple-Accelerator Effect. *See* also Depew, H. A.	VII, 103
——, AND H. A. DEPEW. Reactions During Vulcanization. I. Influence of Zinc and Lead on Rate of Cure of Stocks Accelerated with Tetramethylthiuram Monosulfide	V, 39
JONES, MALDWYN. Organic Accelerators and Problems Connected with Their Use in the Factory	IX, 1
Short Note on the Tensile-Testing of Rubber	V, 351
See also Cassie, A. B. D., Naunton, W. J. S.	
JONES, PAUL C., AND DAVID CRAIG. Behavior of Antioxidants in Rubber Containing Copper	IV, 108
JONES, WEBSTER N. *See* Haushalter, F. L.; Kelly, Arthur; Taylor, Bert S.	
JONG, A. W. K. DE. Modifications of the Gutta-Percha Hydrocarbon. Part 2	VI, 86
—— (IN COLLABORATION WITH J. R. KATZ). Modification of the Gutta-Percha Hydrocarbon	V, 287
JORDAN, H. F., P. D. BRASS, AND C. P. ROE. Examination of Rubber Latex and Rubber Latex Compounds. I. Physical Testing Methods	X, 615
JOSEPH, H. *See* Staudinger, H.	
KAGAN, B., AND N. SUKHAREVA. Oxidation of Rubber by Hydrogen Peroxide	VIII, 352
KAHANE, ERNEST. Perchloric Method for the Determination of Sulfur in Rubber	VII, 730
KAHLER, H. LEWIS. *See* Sheen, Robert F.	
KAJIMA, KITARO. *See* Minatoya, Shukusaburo.	
KAJIMOTO, SHINJI. *See* Kobayashi, Ryônosuke.	
KAMBARA, SHÛ. Oil Resistance of Rubber. II. Molecular Polarization and Dipole Moment of Purified Natural Rubber	IX, 296
III. Viscosities and Molecular Polarizations of Rubber Solutions	IX, 593
IV. Mechanism of the Oil Resistance of Neoprene	X, 312
See also Tanaka, Yoshio.	
KARRER, E. Meaning and Measurement of Plasticity	II, 592
A New Plastometer	II, 601
——, J. M. DAVIES, AND E. O. DIETERICH. A Simplified Goodrich Plastometer	III, 295
KATZ, J. R. *See* Jong, A. W. K. de.	
KATZ, J. R. X-Ray Spectrography of Polymers, and in Particular Those Having a Rubber-like Extensibility	IX, 357
KATZ, MORRIS. *See* Whitby, G. Stafford.	
KAWAMURA, JIRO, AND KUNIKITI TANAKA. Investigations of Colloidal Solutions of Rubber.	
I. The Influence of the Precipitating Agent on Rubber Solutions	V, 626
II. Effect of the Precipitating Agent and the Influence of the Temperature on the Solvated Particles of Rubber	V, 627

	Volume and Page
KEARSLEY, E. P. W. Standardization of Ozone Testing	IV, 13
——, AND C. R. PARK. Effect of Grit on the Stress and Strain Properties of a Carbon Black Stock	IV, 404
——, AND G. L. ROBERTS. Influence of Physical Properties of Carbon Black on Its Tinting Strength	IV, 569
KEENAN, R. L. Formation of Thin Films of Organic Colloids on Mercury Surfaces	III, 245
KEHLEN, HANS. *See* Pummerer, Rudolf.	
KELLER, T. P. *See* Beaver, D. J.	
KELLY, ARTHUR, BERT S. TAYLOR, AND WEBSTER N. JONES. Aging of Stretched Rubber	I, 106
KELTNER, L. R. Measuring Temperatures of Calender Rolls	II, 248
KEMP, A. R. Purified Rubber for Electrical Insulation	X, 474
See also Ingmanson, J. H.	
——, W. S. BISHOP, AND T. J. LACKNER. Direct Determination of Rubber in Soft Vulcanized Rubber	I, 211
——, W. S. BISHOP, AND P. A. LASSELLE. Oxidation Studies of Rubber, Gutta-Percha, and Balata Hydrocarbons	V, 51
——, AND J. H. INGMANSON. High-Speed Vulcanization of Rubber	X, 743
——, AND G. S. MUELLER. Iodine Value of Rubber and Gutta-Percha Hydrocarbons as Determined by Iodine Chloride	VII, 576
KEMP, I., AND D. F. TWISS. Surface Composition of the Rubber Globules in Hevea Latex	IX, 551
KHERASKOVA, E., AND E. KORSUNSKAYA. Determination of Free Sulfur in Rubber Containing Mercaptobenzothiazole and Tetramethylthiuram Disulfide	IX, 511
——, AND L. VEISBRUT. Determination of Total and Free Selenium in Vulcanizates	IX, 167
KHVOSTOVSKAYA, S., AND B. MARGARITOV. Elastic Hysteresis and Increase in Tensile Strength at Low Temperatures	VIII, 522
KHOVRINA. *See* Gusev, N.	
KILBOURN, F. L., JR., AND G. W. MILLER. Rate of Cure of Reclaimed Rubber. Part 2	III, 315
KIMISHIMA, TAKEO. Reactions of Aniline and Its Homologs as Accelerators of Vulcanization	I, 307
KING, J. G. *See* Cawley, C. M	
KIRBY, JAMES E. *See* Carothers, W.	
KIRCHHOF, F. Color Reactions of Rubber and Gutta-Percha	II, 193; III, 22
Influence of Vulcanization on the Index of Refraction of Rubber	VII, 608
New Condensation Products of Rubber Hydrocarbons by the Aid of Benzyl Chloride	V, 110
Problem of the Evaluation of Reclaimed Rubber by Analytical Methods	VIII, 597
Protective Action of Some Antioxidants. II. The Metal Halide Compounds of Some Protective Agents against Aging, with Special Reference to Aldol-Alpha-Naphthylamine	IV, 239, lxiii
Question of Vulcanization without Sulfur	III, 190
Refractometry of Rubber and Gutta-Percha Hydrocarbons. I. The Influence of Depolymerization and Oxidation on the Refractive Exponents of These Hydrocarbons	VI, 92
Resistance of Anisotropic Rubber Sheets to Cutting and to Tearing	VII, 289
Rubber Antioxygens. III. The Behavior of Natural and Artificial Protective Agents toward Sunlight and Ultra-violet Light. (Preliminary communication.)	VI, 391
Simplification and Improvement in the Determination of Copper in Fabrics and Rubberized Materials	V, 356
KISTLER, S. S. Coherent Expanded Aerogels	V, 600
KITAYAMA, HIROSHI. *See* Aoe, Ichiro.	
KITCHEN, DONALD W. Studies in the Vulcanization of Rubber. V. Dielectric Constant and Power Factor of Vulcanized Rubber	V, 367
KLEBANSKIĬ, A. L., AND M. RAKHLINA. Chlorination of Polymers of Chloroprene Rubber	X, 467
——, A. L., L. G. TZYURIKH, AND I. M. DOLGOPOL'SKIĬ. Chloroprene Synthetic Rubber (Sovprene)	IX, 383
——, AND V. G. VASIL'EVA. Structure of Synthetic Types of Rubber Polychloroprenes	X, 126
KLEIN, H. C. *See* Hoover, J. R.	
KLEIN, PAUL. Making Rubber Goods of Latex by Electro-Deposition	II, 278
KNOWLAND, T. M. Strength and Stretch of Double Texture Rubber Goods	III, 531
Tire Design with Relation to Comfort, Flexibility, and Wear	II, 479
KOBAYASHI, RYÔNOSUKE, MINAO FURIHATA, AND SHUNJI KAJIMOTO. Production of Gasoline by Means of Hydrodepolymerization of Rubber	IX, 589
KOCH, ALBERT. Specific Properties of Artificial [Buna] Rubber	X, 17
KOHMAN, G. T. Absorption of Oxygen by Rubber	II, 390
KOJIMA, KITARO AND IZUMI NAGAI. Studies on the Combined Use of Two Different Accelerators. II. Mercaptobenzothiazole and Methyleneaniline	V, 663
See also Minatoya, S.	
KORSUNSKAYA, E. *See* Kheraskova, E.	
KOSLOW, N. S. *See* Zelinskiĭ, N. D.	
KRALL, STANLEY. Natural *vs.* Artificial Aging	III, 148
KRAUTZ, W. J. *See* DeFrance, M. J.	
KREPS, B. S. A Rapid Method for Determining Sulfur and Ash in Rubber by Ignition of the Rubber in Oxygen	IX, 492
Verification of the Specific Gravity of Rubber before and after Its Vulcanization	VI, 103
KRISMANN, E. H. *See* Bridgwater, E. R., Hayden, O. M.	
KRUILOV, K. I. Investigation of the Structure of Rubber by Means of Electron Diffraction	IX, 409
KUSOV, A. Determination of the Optimum Vulcanization by Means of the Residual Elongation	VIII, 548
KUWATA, TSUTOMU. *See* Tanaka, Yoshio.	
LACKNER, T. J. *See* Kemp, A. R.	
LAMBARA, SHŪ. *See* Kambara, Shu.	
LAMBOURN, L. J. Methods of Determining Abrasion with Particular Reference to the Relation between Road Performances and Laboratory Tests	II, 166

	Volume and Page
LANGELAND, EARLE E. New Rubber Particle Count in Hevea Latex	IX, 644
LANGENBECK, W., AND H. E. RHIEM. Mode of Action of Disulfide Accelerators of Vulcanization	X, 158
LASSELLE, P. A. *See* Kemp, A. R.	
LAUER, G. G. *See* Bondy, H. F.	
LAWRENENKO, M. *See* Dogadkin, B.	
LEDUC, HENRI. Uniform Vulcanization	IX, 193
LEENDERSTE, J. J. *See* Waterman, H. I.	
LEFCADITIS, G. D. Multi-Form Plastometer	VII, 130
Studies in the Interfacial Relationships between Rubber and Fillers. I. The Tear-Resistance of Vulcanized Rubber. Part 4	VII, 465
II. The Effect of Surface Treatments on Clay as a Rubber Filler	VI, 469
III. Properties of Vulcanized Rubber Prepared from Compounded Latex	VI, 473
IV. The Effect of Mastication on the Properties of Vulcanized Rubber	VI, 475
——, AND F. H. COTTON. Studies in the Interfacial Relationships between Rubber and Fillers I. The Tear-Resistance of Vulcanized Rubber. Parts 1, 2, 3	VI, 325
LEICESTER, HENRY M. *See* Midgley, Thomas, Jr.	
LENS, J. The Solvation of Rubber Sols	VI, 265
LEUPOLD, E. O. *See* Staudinger, H.	
LEVI, T. G. Condensation Products of Aminophenols with Aldehydes	III, 51
Quebrachitol from the Serum of Hevea Latex	III, 1
Vulcanization of Rubber by Diazoamino Compounds	X, 471
LEVINA, S. *See* Ermolenko, N.	
LINDSLY, C. HERBERT. Determination of Sulfur in Rubber Compounds. I. Precipitation of Barium Sulfate in the Presence of Picric Acid	IX, 648
II. Sources of Error in the Determination of Free Sulfur in Rubber Compounds Containing Rapid Accelerators and Sulfur-Bearing Accelerators	IX, 656
LINHART, GEORGE A. Note on the Absorption of Oxygen by Sheets of Rubber	V, 597
LOFTON, R. E. Measuring Microscope for Rubber Specimens	VI, 151
LONG, JOHN D., WILLIAM E. SINGER, AND WHEELER P. DAVEY. Fibering of Rubber. Time Lag and Its Relation to Rubber Structure	VII, 505
LOTICHIUS, J. *See* van Rossem, A.	
LOTMAR, W., AND K. H. MEYER. Fine Structure of Crystallized Rubber	X, 242
LOTTE, PIERRE, *See* Moureu, Charles.	
LOZOVSKAYA, I. *See* Bartenev, S.	
LUNN, R. W. Pigment Reinforcement	II, 409
LÜPKE, PAUL J. The Impact Resiliometer	VII, 591
MACALLUM, A. D., AND G. S. WHITBY. A New Tetramethylbutadiene	I, 341
MCCARTY, J. E., AND EDWARD COUSINS. Factory Mixed Stocks. Method for Maintaining Uniformity	V, 705
MCCOLM, EUGENE. *See* Fisher, Harry L.	
MCGAVACK, J. Properties of Latex-Insulated Wire	VIII, 635
——, AND J. S. RUMBOLD. Alanine in Rubber Latex	VII, 712
Determination of pH of Ammonia Latex	IV, 264
MACK, EDWARD J. Structure of Rubber and the Mechanism of Elastic Stretching	VIII, 192
MACKAY, J. G. Experiments on the Electrodeposition of Rubber from Latex	V, 232
Measurement of the pH Value of Rubber Latex	III, 616
MACKAY, J. W. *See* Beaver, D. J.	
MCKEE, RALPH H., AND HARLAN A. DEPEW. "Normal Aging" of Compounded Rubber	I, 218
MCPHERSON, ARCHIBALD T. A Method for the Purification of Rubber and Properties of the Purified Rubber	V, 523
See also Holt, William L.; Scott, A. H.; Thibodeau, Wilfred E.	
——, AND NORMAN BEKKEDAHL. Heats of Reaction of the System: Rubber–Sulfur	V II, 456
——, AND ARTHUR D. CUMMINGS. Refractive Index of Rubber	VIII, 421
MADGE, E. W. Physico-Chemical Properties of Latex and Their Significance in Manufacture	VIII, 501
MAIR, JOHN A., AND JOHN TODD. Oxidation of Rubber, Gutta-Percha, and Balata with Hydrogen Peroxide	V, 587
MARGARITOV, V. *See* Frumkin, L., Khvostovskaya, S.	
MARGOLINA, J. *See* Dogadkin, B.	
MARGOLINA, YU. *See* Farberov, M. I.	
MARK, H. *See* Fikentscher, H.	
——, AND E. VALKO. Phenomena of the Mechanical Deformation of Rubber	IV, 54
MARTIN, G. Evaluation of Raw Rubber	IV, 299
See also Thiollet, R.	
——, AND W. S. DAVEY. Rubber from Latex Coagulated with Sulfuric Acid	VIII, 274
——, AND L. E. ELLIOTT. The Cause of Variability in the Plasticity of Plantation Rubber after Storage	V, 219
——, (IN COLLABORATION WITH J. SISLEY.) Investigation of the Causes of Spots Which Appeared Spontaneously on Rubberized Fabrics	V, 363
——, AND R. THIOLLET. Influence of Certain Accelerators on the Aging of Rubber	V, 320
An Attempt at a Rational Classification of the Principal Accelerators of Vulcanization	II, 356
MATHESON, HARRY. *See* Bekkedahl, Norman.	
MATHEWS, W. C. *See* Barnett, C. E.	
MATTHÄUS, GEORGE. *See* Pummerer, R.	
MAX, C. G. H. *See* Waterman, H. I.	
MAXWELL, R. B. *See* Park, C. R.	
MEAD, MORRIS W., JR. *See* Temple, J. W.	
MENADUE, F. B. Diphase Rubber. The Diphase-Forming Tendency of Rubber as Shown by the Action of Pigments	VI, 442
MERZ, OTTO. Atmospheric Cracks on Unstretched Rubber Products. Their Origin and Prevention	VI, 33

	Volume and Page
MESSENGER, T. H. Heats of Combustion of Rubber, Gutta-Percha, and Balata	III, 24
Solution Properties of Dried Rubber	VII, 297
——, AND J. R. SCOTT. Softening and Freezing of Crepe	X, 7
Tests on Crepe Soling. III. Water Absorption	X, 500
MEYER, KURT H. Inorganic Substances with Rubber-like Properties	IX, 422
See also Lotmar, W.	
——, AND CESARE FERRI. Properties of Higher Polymers in Solution. III. The Action of Ultra-Violet Light on Dissolved Rubber	IX, 570
Elasticity of Rubber	VIII, 319
——, AND W. HOHENEMSER. Contribution to the Study of the Vulcanization Reaction	IX, 201
MIDGLEY, THOMAS, Jr., AND ALBERT L. HENNE. Natural and Synthetic Rubber.	
I. Products of the Destructive Distillation of Natural Rubber	II, 441
II. Reduction of Isoprene by Na-NH_3	II, 452
III. Dimethyloctadiene	II, 453
IV. 4-Methyl-4-Octene by Isoprene Ethylation	III, 483
V. Tetramethyloctadiene	III, 485
VI. Pyrolysis of Natural Rubber in the Presence of Metallic Oxides	IV, 98
XVII. Separation of Sol Rubber and Gel Rubber	X, 641
Separation and Identification of Sol Rubber Hydrocarbons	VI, 367
——, ALBERT L. HENNE, AND HENRY M. LEICESTER. Natural and Synethtic Rubber. XVI. Structure of Polystyrene	X, 150
——, ALBERT L. HENNE, AND MARY W. RENOLL. Natural and Synthetic Rubber.	
VII. Fractional Precipitation of Natural Rubber	IV, 547
X. Constituents of the Rubber Hydrocarbon	V, 537
XI. Constituents of the Milled Rubber Hydrocarbon	V, 543
——, ALBERT L. HENNE, AND ALVIN F. SHEPARD. Natural and Synthetic Rubber.	
VIII. Products of the Destructive Distillation of Sodium Rubber	V, 1
IX. Products of the Destructive Distillation of Ebonite	V, 530
XII. Reversible Vulcanization, by Organo-Metallic Derivatives	VII, 516
XIV. Structural Formula for Ebonite	VII, 520
——, ALBERT L. HENNE, ALVIN F. SHEPARD, AND MARY W. RENOLL. Natural and Synthetic Rubber. XIII. Molecular Weight of Sol Rubber	VII, 518
XV. Oxygen in Rubber	IX, 74
MIEDEL, H. *See* Pummerer, R.	
MIKHAĬLOV, N. I. *See* Buizov, B. V.	
MILLER, C. H. *See* Bloomfield, G. F.	
MILLER, GEORGE W. Effect of Repeated Reclaiming of Rubber	II, 81
See also Kilbourn, F. L., Jr., Palmer, Henry F., Shepard, Norman A.	
MINATANI, IWASABURO AND ICHIRO AOE. Determination of the Chloroform-Soluble Substance of Vulcanized Rubber	IV, 517
MINATOYA SYUKUSABURÔ, ITIRÔ AOE, AND IDUMI NAGAI. Determination of True Free Sulfur in Vulcanized Rubber. A Modification of the Thiocyanate Method	IX, 172
——, KITARO KOJIMA, AND IZUMI NAGAI. Studies on the Combined Use of Two Different Accelerators.	
I. Diphenylguanidine and Mercaptobenzothiazole	V, 657
Studies on the Combined Action of Organic Accelerators for Rubber Vulcanization	VI, 402
MOJEN, H. P. Isoprene and Rubber. Part 47. Decomposition of Rubber by Acids	X, 445
See also Staudinger, H.	
MOLODENSKIĬ, V. S. *See* Buizov, B. V.	
MOONEY, MELVIN. Rheology of Raw Rubber	X, 214
Shearing Disk Plastometer for Unvulcanized Rubber	VII, 564
MOORHOUSE, R. W. Goodyear Experience in Temperature Control of Mill Rolls	II, 251
MORIKAWA, KIKUO. *See* Horie, Hukio.	
MORRIS, T. C. Solubility of Organic Compounds in Rubber	V, 420
See also Gehman, S. D.	
MORRIS, V. N. Permeability of Rubber to Air. II. Effect of Stretch, Thickness, Milling, Compounding Ingredients, Kind of Crude Rubber, and Temperature of Vulcanization	IV, 576
See also Park, C. R.	
——, AND H. W. GREENUP. Rubber Latex. Recent Scientific and Technical Developments	V, 469
——, AND J. N. STREET. Permeability of Rubber to Air. I. Effect of Temperature, Pressure, and Humidity	III, 99
MORRISON, J. Rubber in Compression	X, 768
MOTZ, H. *See* Trillat, J. J.	
MOUREU, CHARLES, CHARLES DUFRAISSE, AND PIERRE LOTTE. Aging of Rubber and Its Retardation by the Surface Application of Antioxygens	III, 370
MUELLER, G. S. *See* Kemp, A. R.	
NAGAI, HIROSHI. Hardness of Vulcanized Rubber at Low Temperatures	X, 55
Studies on the Artificial Aging of Vulcanized Rubber. I. Depolymerization during Heat-Aging	X, 164
II. The Relation between Aging and Temperature	X, 170
III. Aging in Nitrogen Gas	X, 174
NAGAI, IDUMI. *See* Minatoya, S.	
NAGLE, P. G. Mercury Vapor Arc Lamp: Its Uses in a Rubber Factory	I, 284
NAKAJIMA, TOKEJI. *See* Hada, Kyoichi.	
NAMIKI, TOSHIO. *See* Fujiwara, Takeo.	
NATTA, G. *See* Bruni, G.	
NAUNTON, W. J. S. Influence of Light on the Color of White Rubber	III, 615
Organic Rubber Colors	II, 99
See also Cassie, A. B. D., Flint, C. F.	
——, W. BAIRD, AND H. M. BUNBURY. Delayed-Action Accelerators	VII, 417
——, MALDWYN JONES, AND W. F. SMITH. Oil-Resisting Rubber	VII, 234

	Volume and Page
NEAL, ARTHUR M. *See* Williams, Ira.	
——, AND ALFRED J. NORTHAM. Some Factors Affecting Resistance to Flexing	V, 90
NELLEN, ARTHUR H. Extrusion Qualities of Rubber. Effect of Temperature and Mill Roll Opening	X, 801
——, AND H. M. SELLERS. Correlation between Geer Oven and Natural Aging of Selected Tire Compounds	III, 175
NELSON, WILLIAM G. Comments [on Rubber Production]	IX, 165
NODZU, R. *See* Staudinger, H.	
NOGUCHI, TAKASHI. *See* Tanaka, Yoshio.	
NORDLANDER, BIRGER W. Kinetics of the Vulcanization of Rubber	IV, 164
NORTH, C. OLIN. Effect of Increased Quantities of Stearic Acid on Tread Abrasions	II, 623
NORTHAM, ALFRED J. *See* Neal, Arthur M.	
NOTO, JIRO. *See* Tanaka, Yoshio.	
NUMAJIRI, SEIITI. Studies of Hard Rubber Reactions. III. Changes in the Acetone Extract during Vulcanization	X, 153, 787
IV. Coefficients of Vulcanization	X, 792
V. Loss of Total Sulfur during Vulcanization	X, 795
NUMAZIRI, SEIITI. *See* Numajiri, Seiiti.	
OBERTO, S. Evolution of Heat during Vulcanization	X, 725
OHYA, T. *See* Davey, W. Cecil.	
OKITA, TADAO. Study of Deproteinized Rubber	X, 279
An Improvement on the Williams Abrasion Tester	IX, 502
OKUMURA, K. *See* Yamazaki, T.	
OKUYAMA, KAROKU. *See* Yamazaki, Takeji.	
OLCOTT, L. E. *See* Greenup, H. W.	
OLDHAM, E. W., L. M. BAKER, AND M. W. CRAYTOR. Determination of Free Sulfur in Rubber	IX, 514
OLDHAM, E. W., AND J. G. HARRISON, JR. Determination of Free Carbon in Rubber Goods.	X, 635
ORNSTEIN, L. S., (MISS) J. G. EYMERS, AND J. WOUDA. Thermodynamics of Rubber. I. Rubber as a System of Two Phases	III, 397
——, J. WOUDA, AND (MISS) J. G. EYMERS. Thermodynamics of Rubber. II. Temperature Change of Rubber under Adiabatic Stretching	III, 403
OSTERHOF, H. J. *See* Gehman, S. D.	
OSTROMISLENSKY, IWAN. Vulcanization of Rubber by Organic Peroxides or by Ammonium Persulfate	III, 195
Vulcanization without the Use of Sulfur	II, 489
OTT, EMIL. X-Ray Investigations on Rubber	IV, 82
PAHL, H. *See* Pummerer, R.	
PAKHOMOVA, E. A. *See* Fabritziev, B. V.	
PALMER, HENRY F. *See* Shepard, Norman A.	
PALMER, HENRY F., AND GEORGE W. MILLER. Determination of Alkalinity of Reclaimed Rubber	IV, 273
PANKOW, GEORG W. *ß*-Modification of Gutta-Percha Hydrocarbon	IX, 587
PANTSCHENKOV, G. *See* Dogadkin, B.	
PARK, C. R. Effect of Curing Temperature on the Properties of a Rubber-Sulfur Mix	IV, 100
See also Cox, L. B., Goodwin, Norris, Kearsley, E. P. W.	
——, C. M. CARSON, AND L. B. SEBRELL. Effect of Heat on Raw Rubber	I, 193
——, AND R. B. MAXWELL. Temperature Coefficient of Vulcanization. Determination for Mixes Accelerated with Mercaptobenzothiazole and a Crotonaldehyde-Aniline Condensation Product	V, 192
——, AND V. N. MORRIS. Dispersion of Channel Gas Black in Rubber. Effect of Stearic Acid and Other So-called Dispersing Agents	VIII, 470
PARKINSON, D. Some Properties of Carbon Black	III, 418
PARKS, GEORGE S. Amorphous and Crystalline Forms of Rubber Hydrocarbon	X, 135, 393
PARTENHEIMER, J. E., *et al.* Importance of Temperature and Humidity Control in Rubber Testing	I, 182, 515
PATRICK, J. C. Formation of High Polymers by Condensation between Metallic Polysulfides and Dihalogenated Hydrocarbons and Ethers	IX, 373
PAULY, H. Color Reactions in Rubber	I, 361
PEARSALL, DAVID E. Influence of the Sulfur-Rubber Ratio on the Physical Properties of Hard Rubber	I, 137
PETERSON, LESTER C. *See* Torrance, Philip M.	
PEWSNER, D. *See* Dogadkin, B.	
PHILIPPOFF, W. Viscosity Characteristics of Rubber Solutions	X, 76
PHILPOTT, M. W. Accelerators Derived from Piperidine	VII, 426
PHYSICAL TESTING COMMITTEE, RUBBER DIVISION, A. C. S. Outline of Tentative Standard Laboratory Procedure for the Preparation and Physical Testing of Rubber Samples	III, 179
Importance of Temperature and Humidity Control in Rubber Testing. Progress Report	I, 182
Part 1. Stress-Strain and Tensile Properties	I, 515
Part 2. Resistance to Abrasion	II, 680
PICKERING, N. W. Chilled Iron Rolls in the Rubber Industry	I, 369
PLUMMER, WILLIAM B. Moisture Content of Carbon Blacks	III, 185
PLUMMER, W. B., AND D. J. BEAVER. Abrasion Tests of Rubber Stocks Containing Various Types of Carbon Black	I, 465
POPOVA, M. K. *See* Buizov, B. V.	
PORRITT, B. D. *See* Fry, J. D., Tiltman, H. A., Webster, D. M.	
——, AND J. R. SCOTT. Alcoholic Potash Extraction of Vulcanized Rubber	VII, 736
POWELL, CHARLES S. Recovery of Rubber and Cotton from Uncured Tire Ply Scrap Extraction Process	IV, 450

	Volume and Page
PRADIER-GIBELLO, MME. DENISE. *See* Dufraisse, Charles.	
PRAWIRODIPOERO, R. S. *See* van Rossem, Z.	
PRESTWICH, R. D. Effect of Temperature on the Plasticity of Rubber	VII, 265
PREUSSE, CARL HEINZ. *See* Ditmar, Rudolf.	
PUFETT, W. *See* Stern, H. J.	
PUMMERER, RUDOLF. Constitution of Rubber	IV, 206
New Results on the Ozone Decomposition of Natural Rubber and of Sodium-Butadiene Rubber	VIII, 39
Various Ozonides of Rubber and the General Question of the Existence of Primary Ozonides	X, 114
PUMMERER, RUDOLF, ALBRECHT ANDRIESSEN, AND WOLFGANG GÜNDEL. Rubber. VII. Purification and Fractionation of Rubber	II, 367
Rubber. IX. Cryoscopic Measurements of Rubber Solutions and the Separation of Mixed Phases from Benzene Solutions of Rubber	III, 487
——, GEORGE EBERMAYER, AND KARL GERLACH. Rubber. XII. Levulinic Acid Peroxide from Rubber	IV, 381
Rubber. XIII. The Ozone-Decomposition of Rubber	IV, 386
——, AND WOLFGANG GÜNDEL. Rubber. VIII. Preparation and Molecular Size of Isorubber Nitrone	II, 373
——, AND HANS KEHLEN. Rubber. XV. Polymerization of Rubber, Isoprene, and Styrene by Light in the Presence of Sensitizing Agents	VII, 184
——, AND HERMANN MIEDEL. Methods for the Purification of Rubber Hydrocarbons	I, 163
——, AND HANS PAHL. Preparation of Pure Rubber from Latex by Means of Alkali, and Its Separation into Sol Rubber and Gel Rubber	I, 167
——, GEORGE MATTHÄUS, AND L. SOCIAS-VIÑALS. Rubber. XVII. Detection of Methylglyoxal and the Ozone Cleavage of Rubber	IX, 558
——, AND HERMANN STÄRK. Rubber. XIV. Behavior of Rubber with Iodine Chloride and with Dithiocyanogen	IV, 399
——, AND Rubber. XVI. Method of A. R. Kemp for the Determination of the Iodine Number of Rubber	VII, 587
——, AND G. VON SUSICH. Crystallized Rubber	V, 245
RAE, GEORGE. The World's Rubber Supplies	IV, 281
RAINIER, E. T., AND ROSCOE H. GERKE. Fatigue-Cracking Test for Tire Tread Compounds. Some of the Laws of Fatigue	IX, 178
RAW RUBBER SPECIFICATIONS COMMITTEE OF THE A. C. S. REPORT	II, 335
REDFARN, C. A. *See* Schidrowitz, P.	
REECE, W. H. Chemical Reactions in Rubber Compounds. I. Reactions between Pine Tar and Litharge	II, 567
REED, MARION C. Effect of Antioxidants in Typical Rubber Stocks	II, 456
REINER, MARKUS. Viscometric Studies of Rubber Solutions	VIII, 259
RENAUD, PAUL. Inorganic Rubber	V, 585
RENOLL, MARY W. *See* Midgley, Thomas, Jr.	
RHEIM, H. C. *See* Langenbeck, W.	
RHODES, EDGAR. Rubber Production	IX, 154
Specific Gravity of Preserved Latex	VIII, 284, 448
Survey of Latex Coagulants Used by Malayan Small-Holders	X, 267
See also Bishop, R. O., Eaton, B. J., Hastings, J. D.	
——, AND R. O. BISHOP. Lipin of Hevea Latex	IV, 330
——, AND K. C. SEKAR. Causes of Discoloration in Preserved Latex	VII, 433
——, Investigations of Internal Protective Coatings for Latex Containers and Their Value in Minimizing Discoloration in Preserved Latex	IX, 486
Preservation of Latex by Acids	X, 688
RIEBL, R. *See* de Vries, O.	
RIMPEL, H. Problem of the Action of Selenium in Rubber Mixtures	IV, 519
ROBERTS, G. L. *See* Kearsley, E. P. W.	
ROBERTS, K. C. Components of Hevea Latex. I. Isolation and Quantitative Determination of the Components	X, 1
ROBERTSON, J. A., AND J. YOUNG. Volumetric Determination of Free Sulfur in Rubber	VI, 518
ROE, C. P. *See* Jordan, H. F.	
ROGOV, N. Determination of Free Sulfur in Rubber. Part 2. Oxidation of Free Sulfur with Permanganate	VIII, 88
ROSSEM, A. VAN. Chemical Aspects of Vulcanization	X, 203
Plastic and Elastic Phenomena in Rubber	VIII, 395
——, AND H. B. BEVERDAM. Tensile Tests of Vulcanized Rubber at High Speed	IV, 147
——, AND P. DEKKER. Oxidation of Vulcanized Rubber	II, 341
——, P. DEKKER, AND R. S. PRAWIRODIPOERO. Vulcanization with Benzoyl Peroxide. I. Contribution to the Knowledge of the Vulcanization Process	V, 97
——, AND J. H. E. HESSELS. Russell Effect with Rubber	VII, 309
——, AND J. LOTICHIUS. "Freezing" of Raw Rubber	II, 378
——, AND H. VAN DER MEIJDEN. Plasticity and Elasticity of Rubber	I, 393
——, AND H. W. TALEN. Appearance of Atmospheric Cracks in Stretched Rubber	IV, 490
ROWLAND, B. W. Some Aspects of Double Refraction and Structure in Rubber	IV, 83
RUMBOLD, R. S. *See* McGavack, J.	
RUSSELL, W. F. *See* Somerville, A. A.	
SACKETT, GEORGE A. Consumers' Crude Rubber Requirements	IX, 146
Manganese Salts in Plantation Rubber	VIII, 305
Plantation Studies of Crude Rubber Variation	VII, 525
SAGER, T. P. Preparation of Thin Films	X, 639
SAITO, SHOHEI, AND KATSUMI ISHIGURO. Studies on Vibration Tests of Rubber	X, 556
SALADINI, B. Determination of Sulfur in Rubber by Means of the Calorimetric Bomb	V, 216
SANDERSON, C. W. Value of Reclaimed Rubber in Tread Stock	II, 517

	Volume and Page
SANDOMIRSKY, D. *See* Dogadkin, B.	
SATAKE, SHOZO. Corrosive Action of Sulfur against Metallic Copper during Vulcanization.	IX, 281
SAYLOR, CHARLES PROFFER. *See* Smith, W. Harold.	
SCHAAL, W. *See* Staudinger, H.	
SCHADE, J. W. *See* Haushalter, F. L.	
SCHIDROWITZ, P. Research on Modified Rubbers. III. Adhesive Latex. (*b*) Characteristics of and Tests on Sticky Latex	VII, 452
V. Technological Properties of Chlorinated Rubbers from Latex. V(*a*). Technological Properties of Rubber Oxidation Products	VIII, 613
——, AND C. A. REDFARN. Research on Modified Rubbers. VII. Expanded Chlorinated Rubber	VIII, 616
Expanded Chlorinated Rubber	X, 798
SCHMIDT, HANS. *See* Hock, Lothar.	
SCHOENFELD, FRANK K. Surface Chemistry of Carbon Black. Effect on Vulcanization of Rubber	VIII, 483
SCHOSSBERGER, FRITZ. *See* Iguchi, Morihiro.	
SCHUBERT, Y. *See* Fisher, Harry L.	
SCHULZ, GÜNTER VIKTOR. Determination of the Size, Form, and Solvation of Macromolecules	VI, 101
SCHUMACHER, EARLE E., AND LAWRENCE FERGUSON. Diffusion of Water through Rubber.	II, 323
SCHWALBACH, A. *See* Staudinger, H.	
SCHWARZKOPF, OTTO. Influence of Catalysts in the Reaction of Sulfur on Unsaturated Organic Substances. I. Study of Vulcanization at Elevated Temperature	VIII, 225
SCOTT, ARNOLD H. Effect of Pressure on the Dielectric Constant, Power Factor, and Conductivity of Rubber-Sulfur Compounds	IX, 449
Specific Volume, Compressibility, and Volume Thermal Expansivity of Rubber-Sulfur Compounds	VIII, 401
See also Curtis, Harvey L.	
——, A. T. MCPHERSON, AND HARVEY L. CURTIS. Effect of Temperature and Frequency on the Dielectric Constant, Power Factor, and Conductivity of Compounds of Purified Rubber and of Sulfur	VIII, 342
SCOTT, J. R. Rationalization of the Hardness Testing of Rubber	IX, 83
Some Observations on Rubber Testing	VII, 142
Swelling of Vulcanized Rubber in Liquids	III, 3
Theory and Application of the Parallel-Plate Plastimeter. Part 2	VIII, 587
See also Messenger, T. H., Porritt, B. D.	
——, AND C. W. SHACKLOCK. Stress-Strain Relationships of Vulcanized India-Rubber: a Correction	VI, 504
SEBRELL, L. B. *See* Carson, C. M., Park, C. R.	
SEKAR, K. C. *See* Rhodes, Edgar.	
SELLERS, H. M. *See* Nellen, A. H.	
SEMON, W. L. *See* Brous, S. L.	
——, A. W. SLOAN, AND DAVID CRAIG. Surface Application of Age-Resisters to Cured Rubber *vs.* Mill Incorporation Prior to Cure	IV, 116
SENIOR, JAMES. *See* Staudinger, H.	
SHACKLOCK, CECIL W. Further Studies of Rubber Solutions	V, 608
Stress-Strain Relationships of Vulcanized India-Rubber. I. Inflection Point	VI, 486
II. Elasticity and Structure	VI, 495
Surface Tension of Rubber Solutions	IV, 354
SHEEN, ROBERT T., H. LEWIS KAHLER, AND DELBERT C. CLINE. Determination of Sulfur in Rubber. Use of Tetrahydroxyquinone as a Titration Indicator	X, 378
SHEPARD, A. F. *See* Midgley, Thomas, Jr.	
SHEPARD, NORMAN A., HENRY F. PALMER, AND GEORGE W. MILLER. Rate of Cure of Reclaimed Rubber	I, 25
——, AND J. N. STREET. Effect of Curing Temperature on Quality of Vulcanized Rubber.	V, 442
Temperature Coefficient of Vulcanization on a Litharge Compound	II, 505
SHEPPARD, J. R. Stearic Acid in Litharge-Cured Rubber Compounds	II, 638
——, AND W. J. CLAPSON. Compression Stress-Strain of Rubber	VI, 126
——, AND W. B. WIEGAND. Evaluation of Variable-Temperature Cures	I, 423
SHERWOOD, T. K. Heat Transfer in the Vulcanization of Rubber	II, 32
SHIMADA, KEIICHI. Investigations of Unknown Components of Crude Rubber. I. Copper Content of Different Types of Crude Rubber	VIII, 86
Fundamental Studies on the Attributes of Organic Accelerators. XI. Peculiarity of Some Accelerators toward Rubber Sols	IX, 291
XII. Action of Organic Bases on Rubber Sols	IX, 15
XIII. Action of Organic Acids on Rubber Solutions	IX, 17
XIV. Supplement to "Observations on the Behavior of Organic Accelerators toward Rubber Solutions"	IX, 294
Studies on the Nature of the Action of Organic Accelerators of Vulcanization. I. Action of Organic Accelerators on Rubber Sols	VI, 273
II. Special Properties of Organic Accelerators. (1)	VI, 396
III. Special Properties of Organic Accelerators. (2). Action of Ostromislensky's Vulcanizing Agents on Rubber Sols	VI, 400
VI. Detection and Analysis of Organic Accelerators. (3). Analysis of Water-Soluble Ultra-Accelerators and a New Colorimetric Method for the Microanalysis of Copper and Manganese	VI, 510
Studies on the Nature of the Action of Organic Accelerators for Rubber Vulcanization. IV. Detection and Analysis of Organic Accelerators. Systematic Identification of Organic Accelerators	VI, 507
VII. Effect of Heat on the Surface Tension of Rubber Solutions	VIII, 69
X. Action of Organic Acids on Rubber Sols	VIII, 73
SHIMADA, KEIITI. *See* Shimada, Keiichi.	
SHINKLE, S. D., A. E. BROOKS, AND G. H. CADY. A New Plastic Material—AXF	IX, 531
SHOAFF, P. S. Factors in Processing Reclaimed Rubber	I, 59

	Volume and Page
Factors in Supply and Use of Cooling Water	I, 364
Power Variables in Milling and Mixing Rubber	I, 383
SIGNER, R. *See* Staudinger, H.	
SIMARD, G. L., AND B. E. WARREN. X-Ray Study of Amorphous Rubber	IX, 417
SIMMONS, H. E. *See* Cummings, A. D.	
SINGER, WILLIAM E. *See* Acken, Marshall F.	
SISLEY, J. *See* Martin, G.	
SKINNER, S. J., AND T. J. DRAKELEY. Absorption of Water by Rubber and Its Relation to the Protein Content	V, 222
Water Absorption by Rubber. II. Vulcanized Rubber	VI, 12
SLOAN, A. W. *See* Semon, W. L.	
SMALLWOOD, HUGH M. Viscosity of Raw Rubber	X, 690
SMITH, C. C. *See* Williams, I.	
SMITH, G. B. L., AND A. J. WEISS. Activity of Certain Aryl-Substituted Biguanides as Accelerators of Vulcanization	I, 113
SMITH, W. F. *See* Naunton, W. J. S.	
SMITH, W. H. *See* Clark, George L.	
SMITH, W. HAROLD, AND WILLIAM L. HOLT. Vulcanization and Stress-Strain Behavior of Sol, Gel, and Total Rubber Hydrocarbon	VIII, 210
——, AND CHARLES PROFFER SAYLOR. Ether-Insoluble or Gel Rubber Hydrocarbon, Its Solution, Crystallization, and Properties	VIII, 214
——, CHARLES PROFFER SAYLOR, AND HENRY J. WING. Preparation and Crystallization of Pure Ether-Soluble Rubber Hydrocarbon; Composition, Melting Point, and Optical Properties	VI, 351
SNYDER, H. L. *See* Cartlidge, R. E.	
SNYDER, J. W. *See* Wiegand, W. B.	
SOCIAS-VIÑALS. *See* Pummerer, R.	
SÖLLNER, K. *See* Daniel, F. K.	
SOMERVILLE, A. A. Effect of Oxygen Absorbers in Rubber	IX, 322
——, AND J. M. BALL. Some New Laboratory Work on Rubber	II, 197
——, J. M. BALL, AND W. H. COPE. Aging of Vulcanized Rubber under Varying Elongation	III, 131
——, J. M. BALL, AND L. A. EDLAND. Autographic Stress-Strain Curves of Rubber at Low Elongations	III, 689
——, AND W. H. COPE. Effect of Temperature on the Stress-Strain Properties of Vulcanized Rubber	II, 1
——, AND W. F. RUSSELL. Effect of Temperature on Tensile Properties of Vulcanized Rubber	VII, 371
Low-Sulfur Compounding	VII, 147
SOULE, K. J. Aging of Mechanical Rubber Goods Stocks by Various Methods	III, 157
Effect on Vulcanized Rubber Compounds of Immersion in Boiling Water	IV, 426
SPENCE, DAVID. Recent Scientific Advances in Connection with Guayule	I, 357
——, AND M. L. CALDWELL. Determination of Rubber in Rubber-Bearing Plants	VII, 111
——, AND J. D. FERRY. Vulcanization of Rubber Latex by Potassium Ferricyanide	X, 762
——, AND C. B. VAN NIEL. Bacterial Decomposition of the Rubber in Hevea Latex	IX, 633
STÄRK, HERMANN. *See* Pummerer, R.	
STAMBERGER, PAUL. An Investigation of the Effect of Gas Black on Rubber	V, 146
Rubber Solutions	V, 260
Study of the Vapor-Pressure Diminution of Rubber Jellies	III, 235
See also Blow, C. M.	
——, AND C. M. BLOW. Action of Solvents with Rubber	IV, 223
Solvation of High Molecular Substances, Especially Rubber	III, 409
Swelling of Rubber	II, 591
STAUDINGER, H. Constitution of Rubber and the Nature of Its Viscous Solutions	VIII, 375
Isoprene and Rubber. 20. Colloidal Nature of Rubber, Gutta-Percha, and Balata	III, 586
21. Molecular Size of Rubber and the Nature of Its Colloidal Solutions	III, 596
25. Homologous Polymeric Hydrorubbers	IV, 524
32. Constitution of Rubber	IV, 368
33. End Groups in Rubber	V, 263
STAUDINGER, H., M. ASANO, H. F. BONDY, AND R. SIGNER. Isoprene and Rubber. 13. Constitution of Rubber	III, 494
——, AND H. F. BONDY. Isoprene and Rubber. 17. Fractionation of Balata	III, 511
19. Molecular Size of Rubber and Balata	III, 519
23. Cryoscopic Measurements of Rubber Solutions	IV, 201
34. Molecules or Micelles in a Rubber Solution	V, 265
35. Soluble and Insoluble Rubber and the Fractionation of Rubber	V, 278
——, M. BRUNNER, AND E. GEIGER. Isoprene and Rubber. 30. Hydromethyl Rubber	V, 141
——, AND W. FEISST. Isoprene and Rubber. 29. High Molecular Hydrorubbers	V, 136
——, E. GEIGER, E. HUBER, W. SCHAAL, AND A. SCHWALBACH. Isoprene and Rubber. 26. Hemicolloidal Hydrorubbers	IV, 532
——, AND H. JOSEPH. Isoprene and Rubber. 22. Isorubber Nitrone	IV, 191
——, AND E. O. LEUPOLD. Isoprene and Rubber. 18. Viscosity Studies on Balata	III, 516
37. Homologous Polypranes	V, 576
41. Hydrogenation of Rubber and Balata	VII, 496
——, AND H. P. MOJEN. Isoprene and Rubber. 44. Viscosity Measurements of Squalene and Hydrosqualene Solutions	IX, 573
45. Viscosity Measurements of Solutions of Rubber and Hydrorubber in Various Solvents	IX, 579
46. Viscosity Measurements of Gel Solutions of Rubber and Hydrorubber	X, 432
——, AND R. NODZU. Isoprene and Rubber. 27. Relations between Viscosity and Molecular Weight of Hydrorubbers	IV, 543
——, AND W. SCHAAL. Isoprene and Rubber. 28. Fractionation and Cracking of Hydrorubber	V, 131

Volume and Page

——, AND JAMES R. SENIOR. Isoprene and Rubber. 24. Reduction of Rubber with Hydriodic Acid ..... IV, 365
STEELE, TRACEY F. Method for Preparing Micro-Sections of Rubber ..... IV, 143
STERN, H. J., AND W. PUFETT. Apparatus for the Extraction of Samples of Rubber and Other Materials with Solvents ..... VII, 599
STEVENS, H. P. Textile Finishes Research ..... VII, 330
——, AND NOEL HEATON. Use of Rubber in Paint Vehicles ..... VII, 486
——, AND W. H. STEVENS. Coating and Impregnation of Textiles with Latex ..... IX, 116
Nature of Vulcanization. Part 4 ..... II, 421
Part 4 (*continued*) ..... V, 117
Part 5 ..... V, 645
Rubbone ..... VIII, 624
——, W. H. STEVENS, AND M. B. DONALD. Rubber in Lubricants ..... VIII, 629
——, W. H. STEVENS, AND NOEL HEATON. Rubber in Paints ..... VIII, 627
STEVENS, W. H. Natural Stabilizers of Latex ..... IX, 130
See also Stevens, H. P.
STILLWELL, CHARLES W., AND GEORGE L. CLARK. Further X-Ray Studies of Gutta-Percha and Balata ..... IV, 445
STREET, JOHN N. Grit in Carbon Black. Effect on Flexing Resistance of Vulcanized Rubber ..... V, 457
See also Morris, V. N., Shepard, Norman A.
SUKHAREVA, N. *See* Kagan, B.
SUSICH, G. VON. Fusion Curve of Natural Rubber ..... IV, 211
See also Garbsch, P., Hopff, H., Pummerer, R.
SUSLIAKOV, A. V. *See* Farberov, M. I.

TALALAY, N. *See* Freundlich, H.
TALEN, H. W. *See* Rossem, A. van.
TANAKA, KUNIKITI. *See* Kawamura, Jiro.
TANAKA, TORAMATSU. *See* Fujiwara, Takeo.
TANAKA, YOSHIO, AND SHÔ KAMBARA. Studies on the Joule Effect of Rubber. II. Thermal Effect on Stretched Latex Vulcanizates ..... X, 231
——, SHÔ KAMBARA, AND HIRONOSUKE FUJITA. Studies on the Joule Effect in Rubber. I. Thermal Effect on Stretched Vulcanized Rubber ..... VIII, 174
——, SHÔ KAMBARA, AND KENJI HIRAKAWA. Oil-Resistance of Rubber. V. Thermal Effect of Vapors on Rubber ..... X, 708
VI. Polar Properties of Natural and Synthetic Rubber ..... X, 713
——, SHÔ KAMBARA, AND JIRÔ NOTO. Oil Resistance of Rubber. I. Study of the Swelling of Vulcanized Rubber ..... IX, 70
——, TSUTOMU KUWATA, AND TAKASHI NOGUCHI. Effect of Addition of Colloids on the Coagulation of Latex ..... IX, 437
TASCHEK, RICHARD. *See* Williams, Dudley.
TAYLOR, BERT S. *See* Kelly, Arthur.
——, AND WEBSTER N. JONES. Effect of Certain Metallic Salts on the Aging of a Tread Compound ..... I, 97
TAYLOR, HUGH S. Fundamentals in the Problem of Resistance to Deterioration ..... VI, 193
TEMPLE, J. W., SIDNEY M. CADWELL, AND MORRIS W. MEAD, JR. Early Stages of Oxidation in Rubber. A Qualitative Application of the Pyrrole Test ..... IV, 126
THIBODEAU, WILFRED E., AND A. T. MCPHERSON. Photoelastic Properties of Soft, Vulcanized Rubber ..... VIII, 183
THIES, H. R. Accurate Method for Comparison of Scorching Qualities of Accelerators ..... II, 68
Scorch Retarders and Scorch-Retarding Materials ..... V, 66
——, AND A. M. CLIFFORD. Plioform—A New Molding Resin. Chemical Reactions of Rubber and Plioform ..... VII, 546
THIESSEN, PETER A., AND WERNER WITTSTADT. Crystals and Fused Substance in Stretched Rubber ..... IX, 52
THIOLLET, R. Remarks on the Formation of Jellies in Rubber Solutions Containing Ultra-Accelerators. Influence of the Solvent ..... V, 296
See also Martin, G.
——, AND G. MARTIN. Attempt at a Rational Classification of the Principal Accelerators of Vulcanization. II. A Study of the Time Required for Vulcanization Giving the Maxima Physical Properties at Different Temperatures ..... III, 38
Influence of the Principal Accelerators of Vulcanization on the Preservation of Rubber. III, 207
Influence of Zinc Oxide on the Action of the Principal Accelerators of Vulcanization. The Preparation of Transparent Vulcanized Rubber ..... IV, 1
THOMPSON, J. H. C. *See* Eccles, J. C.
TILTMAN, H. A., AND B. D. PORRITT. Effect of Solvents on the Stress-Strain Curve of Vulcanized Rubber ..... III, 19
TINGEY, H. C. *See* Gibbons, W. A.
TODD, JOHN. *See* Mair, John A.
TONGBERG, O. *See* Conant, J. B.
TORRANCE, PHILIP M., AND LESTER C. PETERSON. A New Flexing Machine for Rubber ..... II, 525
TOYABE, YASUSHI. Studies of the Heat of Reaction during Vulcanization of Rubber ..... IV, 514
TOYABE, YUTAKA. Studies of Conditions Affecting the Vulcanization of Rubber. V. Effect of Accelerators on the Heat of Vulcanization ..... IV, 190
——, AND KENJI FUKUNAGA. Studies of Conditions Affecting the Vulcanization of Rubber. Part III. Some Properties of Rubber against Solvents ..... III, 242
Part IV. Heat Reaction during Vulcanization ..... III, 384
TRILLAT, J. J., AND H. MOTZ. Diffraction of Electrons by Rubber ..... IX, 585
TULLENERS, A. J. *See* Waterman, H. I.
TURNER, H. Surface-Cracking of Vulcanized Rubber ..... VIII, 58
TWISS, D. F. Vulcanization Process and the Reinforcement of Rubber ..... VII, 482
Some Features of Sulfur in Rubber Manufacture ..... I, 346
See also Kemp, I.

	Volume and Page
——, AND F. A. JONES. Restraining of Vulcanization in Rubber Manufacture	VIII, 230
TZELIKOV. *See* Gusev, N.	
TZYWRIKH, L. G. *See* Klebanskiĭ, A. L.	
USHERWOOD, G. W. Some Aspects of Plasticity and Its Determination	VI, 236
VALKO, E. *See* Mark, H.	
VAN DER MEIJDEN, H. *See* Rossem, A. van.	
VAN GEEL, W. C., AND J. G. EYMERS. Double Refraction of Stretched Rubber	II, 545
VAN NIEL, C. B. *See* Spence, D.	
VAN ROSSEM, A. *See* Rossem, A. van.	
VAN WIJK, D. J. Method for Measuring Quantitatively the Swelling of Vulcanized Rubber in Organic Liquids by Means of a Voluminometer	VI, 406
VASIL'EVA, V. G. *See* Klebanskiĭ, A. L.	
VELLINGER, E. Surface Properties of Rubber	VI, 261
Surface Affinity of Rubber for a Filler	VI, 263
VEISBRUT, L. *See* Kheraskova, E.	
VIELLEFOSSE, ROGER. *See* Dufraisse, Charles.	
VISSER, W. DE. *See* Fol, J. G.	
VOGT, W. W. Analysis of a Typical Angle Abrasion Machine	I, 126
Some Notes on Artificial Aging Tests for Rubber	III, 164
Value of the Rubber Hydrocarbon in Reclaimed Rubber	I, 50
See also Dinsmore, R. P.	
VRIES, DE. *See* de Vries.	
WALTER, PAUL. Use of Acetylene in the Rubber Industry	X, 492
WALTON, JAMES C. Temperature-Recording Micropress for Studying the Course of Vulcanization	II, 462
WARD, J. S. *See* Gehman, S. D.	
WARREN, W. J. *See* Clark, George L.	
WASHBURN, E. W. Crystalline Rubber Hydrocarbon	V, 119
WATERMAN, H. I., R. H. DEWALD, AND A. J. TULLENERS. Berginization of Raw Rubber	III, 33
——, C. G. H. MAX, AND J. J. LEENDERSTE. Preparation from Rubber of Plastic Materials Suitable for the Manufacture of Films and Threads	VIII, 632
WEBSTER, D. M., AND B. D. PORRITT. Experiments on the Causes of the Deterioration of Ebonite When Exposed to Light and Air	III, 618
WEIMARN, P. P. VON, AND COLLABORATORS. Dispersoidological Investigations. XXIII. Contributions to the Dispersoidology of Rubber. 1. Structure of Jellies and of Other Coagula of Ammonia-Preserved Hevea Latex and Hevea Vultex	II, 108
WEISE, RUDOLF. Elasticity Constants of Rubber under High Tensions	V, 676
WEISS, A. J. *See* Smith, G. B. L.	
WHITBY, G. STAFFORD. Some Fundamental Rubber Problems	IV, 465
See also Macallum, A. D.	
——, AND ROBERT NELSON CROZIER. Studies of Polymers and Polymerization. IV. Observations on the Polymerization of Isoprene and 2,3-Dimethylbutadiene-1,3	V, 546
——, AND MORRIS KATZ. Studies of Polymers and of Polymerization. VI. Vulcanization of Methylrubber	V, 566
Synthetic Rubber	VII, 40
WHITE, W. D. *See* Garvey, B. S., Jr.	
WIEGAND, W. B. Carbon Reinforcement of Rubber. Part I. Its Course	X, 395
Part II. Its Cause	X, 400
Effect of Overmilling on Compounded Rubber	V, 671
See also Sheppard, J. R.	
——, AND C. R. BOGGS. Carbon Black in Rubber Insulating Compounds	III, 733
——, AND H. A. BRAENDLE. On the Reduction of Rubber Stress-Strain Determinations	II, 668
——, AND J. W. SNYDER. Rubber Pendulum, the Joule Effect and the Dynamic Stress-Strain Curve	VIII, 151
Some Properties of Carbon Black. I. Adsorption	IV, 407
WILDSCHUT, A. J. Molecular Weight and Chain-Length of Natural and Synthetic Rubber	VII, 34
WILLIAMS, DUDLEY. Application of Infrared Spectroscopy to Rubber Chemistry	X, 249
Infrared Absorption of Rubber and Related Hydrocarbons	X, 120
WILLIAMS, DUDLEY, AND RICHARD TASCHEK. Effects of Elastic Stretch on the Infrared Spectrum of Rubber	X, 697
WILLIAMS, H. G. *See* Bassett, H. Ll.	
WILLIAMS, IRA. Colloidal Changes during Rubber Vulcanization	VIII, 102
Pendulum as a Source of Energy for Plasticity Measurements	IX, 626
Relation of Volume Change to the Mechanism of Rubber Vulcanization	VII, 693
Swelling and Solvation of Rubber in Different Solvents	X, 235
Transformation of Energy by Rubber	III, 74
See also Carothers, Wallace.	
——, AND ARTHUR M. NEAL. Solubility of Oxygen in Rubber and Its Effect on Rate of Oxidation	III, 678
——, AND C. C. SMITH. Hydrazines as Rubber Softeners	IX, 339
WILTSHIRE, J. L. Sulfuric Acid as a Latex Coagulant	VI, 415
WING, HENRY J. *See* Smith, W. H.	
WINKELMANN, H. A., AND E. B. BUSENBURG. Effect of Stearic Acid on Reclaimed Rubber	II, 627
——, AND E. G. CROAKMAN. Behavior of Various Clays with Crude and Reclaimed Rubber	III, 743
Pigment Reënforcement of Reclaimed Rubber	I, 79
Water Absorption of Rubber Compounds	IV, 88
WISTINGHAUSEN, L. V. Consumption of Accelerator during Vulcanization	II, 551
WITTSTADT, WERNER. *See* Thiessen, Peter A.	
WOHLER, L. A. Physical Testing Procedure for Latex Stocks	X, 356

	Volume and Page
WOLESENSKY, EDWARD. Determination of Sulfur in Rubber by the Perchloric Acid Method	II, 45
Evolution of Hydrogen Sulfide from Vulcanized Rubber	III, 386
WOUDA, J. *See* Ornstein, L. S.	
WREN, W. G., AND A. T. FAIRCLOTH. Rubber Latex for Road Surfacing	X, 199
WRIGHT, D. D. New Physical Test for Vulcanized Rubber	II, 308
YAMAMOTO, TATSUMI. Studies on Chlorinated Rubber	IX, 311
YAMAZAKI, T., AND K. OKUMURA. Studies on the Aging of Vulcanized Rubber. XI. Consideration of the Influence of Free Sulfur on Aging of Vulcanized Rubber	V, 655
——, AND KAROKU OKUYAMA. Studies of the Aging of Vulcanized Rubber. X. Relation between Degrees of Oxidation of Vulcanized Rubber and Occurrence of the Maximum State of Acetone Extracts	III, 378
YERELEY, FELIX L. Evaluation of Rubber and Rubber-Like Compositions as Vibration Absorbers. Apparatus for Automatic Recording	X, 827
YOKOSIMA, HIROSI. *See* Itiro, Aoe.	
YOUNG, H. C. Some Engineering Problems in the Rubber Industry	III, 343
YOUNG, J. *See* Robertson, J. A.	
ZELINSKIĬ, N. D., AND N. S. KOSLOV. Thermal Decomposition of Natural and Artificial Rubber in the Presence of Aluminum Chloride	VI, 64
ZELINSKY, N. D., AND N. S. KOSLOW. *See* Zelinskiĭ and N. S. Koslov.	
ZHURAVLEV. *See* Bartenev, S.	
ZIMMERMAN, EARLE C. Experiences with Mixing Mill Roll Speeds and Speed Ratios and Batch Sizes	I, 388
——, AND LESLIE V. COOPER. Softeners and Antisofteners	I, 498

SUBJECTS

	Volume and Page
Abiarana Gutta-Percha Latex	X, 272
Abrasion(s)	
Machine, Analysis of a Typical Angle	I, 126
Methods of Determining	II, 166
Question. Some Factors in the Deterioration of Rubber When Exposed to Frictional Contacts with Other Materials	VI, 345
Tester—Improvement on the Williams	IX, 502
Tests of Rubber Stocks Containing Various Types of Carbon Black	I, 465
Tread	II, 623
Absorption	
and Diffusion of Water in Rubber	X, 660
of Carbon Dioxide by Rubber	V, 604
of Gaseous Nitrogen by Rubber and Gutta-Percha Solutions	X, 254
of Oxygen by Rubber	II, 390
of Oxygen by Sheets of Rubber	V, 597
of Water by Crepe Soling	X, 500
of Water by Rubber	IV, 88; VI, 12
of Water by Rubber and Its Relation to the Protein Content	V, 222
Accelerated Aging *vs.* Shelf Aging	III, 156
Accelerator(s)	
Adsorption Test, Direct	V, 429
Aniline and Its Homologs	I, 307
Biguanides	I, 113
Classification	I, 410; II, 356; III, 38
Combined Action of Organic	VI, 402
Consumption of	II, 551
Delayed Action	VII, 417
Derived from Piperidine	VII, 426
Disulfide	X, 158
Effect, Multiple	VII, 103
Effect on Heat of Vulcanization of	IV, 190
in Hard Rubber	VIII, 75
Influence of Zinc Oxide on	IV, 1
Influence on Aging of Certain	V, 320
Influence on Preservation of Rubber	III, 207
Nature of Action	VI, 273, 396, 400, 507, 510; VIII, 69
of Vulcanization	I, 307
Organic	V, 393, 657; VI, 396, 400, 507; VII, 648; IX, 15, 17, 21, 291
Practice and Modern Compounding	VII, 641
Scorching Qualities of	II, 68
Systematic Identification of	VI, 507
Accurate Method for Comparison of Scorching Qualities of Accelerators	II, 68
Acetone	
Extractable Substances	X, 787
Extraction of Raw Rubber	VIII, 604, 605, 607, 610; IX, 308
Extraction, Effect of Time of	VIII, 607
Extract of Raw Rubber	VIII, 610
Extracts, Maximum State of	III, 378
Acetylene in the Rubber Industry	X, 492
Acetylene Polymers and Their Derivatives.	
II. A New Synthetic Rubber: Chloroprene and Its Polymers	V, 7
III. Addition of Hydrogen Chloride to Vinylacetylene	VI, 121
V. Polymerization of Bromoprene (Third paper on new synthetic rubbers)	VI, 317
Acid Value of Acetone Extract	VIII, 605, 607
Acid Value of Raw Rubber and Its Acetone Extract	VIII, 604
Acidity of Raw Rubber, Determination of	II, 56
Acids	
Decomposition of Rubber by	X, 445
Organic, Action on Rubber Solutions	IX, 17
Preservation of Latex by	X, 688
Action of Copper Salts on Raw Rubber	VII, 618
Action of Hypochlorous Acid on Rubber	VII, 327
Action of Solvents with Rubber	IV, 223
Action of Ultra-Violet Light on Dissolved Rubber	IX, 570
Activity of Certain Aryl-Substituted Biguanides as Accelerators of Vulcanization	I, 113
Adhesion of Ebonite to Metal, Iron Oxide as a Substance for Increasing	IX, 605
Adhesive Latex	VII, 450
Adiabatic Stretching	III, 403
Adsorption	
by Carbon Black	IV, 407
of Stearic Acid by Carbon	II, 633
Studies of Rubber Fillers, Chemical	III, 229
Test, Direct Accelerator	V, 429
Adsorptive Properties of Carbon Black	VIII, 91
Aerogels, Coherent Expanded	V, 600
After-Effect or Drift, Preliminary Study of	X, 224
Age-Resistors	
in Rubber Compounds	VII, 663
Surface Application of	IV, 116
Aging	
Accelerated	VIII, 302

	Volume and Page
Accelerated *vs.* Shelf	III, 156
Artificial	X, 164
Correlation between Geer Oven and Natural	III, 175
Depolymerization during	X, 164
Effects	I, 475
in Nitrogen Gas	X, 164
Influence of Certain Accelerators on	V, 320
Mechanism of	VII, 387
Natural *vs.* Artificial	III, 148
"Normal"	I, 218
of a Tread Compound	I, 97
of Cotton Contained in Rubber Goods	III, 53
of Mechanical Rubber Goods Stocks by Various Methods	III, 157
of Rubber and Its Retardation by the Surface Application of Antioxygens	III, 370
of Rubber, Effect of Ferric Sulfate on	V, 179
of Rubber in Air	VIII, 302
of Rubber Solutions	V, 618
of Stretched Rubber	I, 106
of Vulcanized Rubber	III, 378
of Vulcanized Rubber, Influence of Free Sulfur on	V, 655
of Vulcanized Rubber under Varying Elongation	III, 131
Processes of Rubber	VII, 18, 302
Properties of Sheet Rubber	IX, 545
Rate, Effect of Temperature, and Oxygen Pressure on	X, 336
Test for Tread Compounds, Air-Bomb	X, 371
Test. Relation between Artificial and Natural	III, 144
Tests, Correlation with Natural Shelf Aging of	III, 169
Tests for Rubber, Artificial	III, 164
Air	
Accelerated Aging in	VIII, 302
-Bomb Aging Test for Tread Compounds	X, 371
and Humidity, Surface Resistivity Affected by Light	X, 532
Permeability to	III, 99; IV, 576
Alanine in Rubber Latex	VII, 712
Alcoholic Potash Extraction of Vulcanized Rubber	VII, 736
Aldehydes, Aminophenols with	III, 51
Aldol-Alpha-Naphthylamine, Protective Action	IV, 239, lxiii
Alkalinity of Reclaimed Rubber	IV, 273
Alternating Behavior of Fatty Acids in Rubber Compounds	III, 612
Alternating Currents on Isomerization of Rubber, Influence of High Tension	II, 161
Aluminum Chloride, Thermal Decomposition in Presence of	VI, 64
Aminophenols, Condensation of	III, 51
Ammonium Persulfate, Vulcanization by	III, 195
Amorphous and Crystalline Forms of Rubber Hydrocarbon	X, 135, 393
Amorphous Rubber, X-ray Study of	IX, 417
Analysis of Rubber	X, 574
Analysis of Typical Angle-Abrasion Machine	I, 126
Aniline and Its Homologs as Accelerators, Reactions of	I, 307
Anisotropic Rubber Sheets, Resistance of	VII, 289
Anisotropy of Rubber Compounds in the Flexometer	IX, 608
Anode Process for Rubber Articles and Coatings	VI, 537
Antioxidants	
Effect of	II, 456
in Rubber Containing Copper	IV, 108
of Rubber Latex	VII, 23
Protective Action of Some	IV, 239, lxiii
Technical Application of	II, 243
Antioxygen(s)	
Antioxygens	VI, 391
Concept of	V, 318
Litharge an	VII, 167
Surface Application of	III, 370
Antisofteners	I, 498
Apparatus for Automatic Recording of Vibration Absorbers	X, 827
Appearance of Atmospheric Cracks in Stretched Rubber	IV, 490
Application of Infrared Spectroscopy to Rubber Chemistry	X, 249
Application of the Falling Cylinder to the Measurement of the Viscosity of Thick Rubber Cements	III, 701
Apparatus for Extraction of Samples of Rubber and Other Materials with Solvents	VII, 599
Applications to Rubber of the Concept of Antioxygens and Proöxygens. The Case of Litharge	V, 318
Artificial [Buna] Rubber	X, 17
Ash, Determining Sulfur and	IX, 492
Atmospheric Cracks on Unstretched Rubber Products. Their Origin and Prevention	VI, 33
Attempt at a Rational Classification of the Principal Accelerators of Vulcanization	II, 356
Part 2—A Study of the Time Required for Vulcanization Giving the Maximum Physical Properties at Different Temperatures	III, 38
Autographic Machine for Tensile Testing, New	IV, 591
Autographic Stress-Strain Curves of Rubber at Low Elongations	III, 689
Automotive Rubber Parts Assembled under Compression, Testing of	III, 431, 452
Autoöxidation	
of Balata and of Rubber	VIII, 239
of Rubber	VI, 301
of Rubber Latex	VI, 378

	Volume and Page
AFX, a New Plastic Material	IX, 531
Bacterial Decomposition of the Rubber in Hevea Latex	IX, 633
Balance-Plastometer: A Simple Instrument for Measuring Plasticity and Recovery of Soft Materials	VII, 136
Balata, Autoöxidation of	VIII, 239
Colloidal Nature of	III, 586
Fractionation of	III, 511
Gutta-Percha and Shellac	I, 1, 11
Heats of Combustion of	I, II, 24
Hydrocarbon	V, 51
Hydrogenation of	VII, 496
Molecular Size of	III, 519
Oxidation of	V, 587; VIII, 239
Polymorphism of	VI, 76
Thermoplastic Products Similar to	I, 11
Viscosity Studies on	III, 516
X-ray Studies of	IV, 445
X-ray Study of	IV, 75
Bases, Organic, Action on Rubber Sols	IX, 15
Battery Separators, Latex	X, 346
Behavior of Antioxidants in Rubber Containing Copper	IV, 108
Behavior of Rubber under Repeated Stresses	V, 79
Behavior of Various Clays with Crude and Reclaimed Rubber	III, 743
Benzoyl Peroxide and Polynitro Compounds, Vulcanization with	I, 101
Benzoyl Peroxide, Rubber Vulcanized with	X, 735
Benzoyl Peroxide, Viscosity of Rubber Solutions under Influence of	IV, 8
Benzoyl Peroxide, Vulcanization with	V, 97
Benzyl Chloride, Condensation Products from	V, 110
Berginization of Raw Rubber	III, 33
β-Modification of Gutta-Percha Hydrocarbon	IX, 587
Biguanides as Accelerators	I, 113
Breakdown of Rubber, Hot *vs.* Cold	X, 195
Brittleness of Ebonite	X, 778
Bromoprene, Polymerization of	VI, 317
[Buna] Rubber	X, 17
Butadiene, Preparation of	I, 208
Butyraldehyde and Isoprene Polymerization Reactions with	III, 472
Butyraldehyde, Some Experiments with	III, 472
Cadmium Compounds, Effect on Accelerators	V, 393
Calender Rolls, Temperatures of	II, 248
Calenders, Gauge at	II, 531
Calorimetric Bomb	V, 216
Carbohydrates, Effect on Vulcanization	V, 636
Carbon, Adsorption of Stearic Acid by	II, 633, 636
Carbon Black(s)	
Abrasion Tests of Stocks Containing	I, 465
Adsorption by	IV, 407
Adsorptive Properties	VIII, 91
and Their Use in Rubber.	
Part 1. Comparative Properties of Blacks and Tests in Uncured Rubber	I, 240
Part 2. Experiments in Cured Rubber	I, 257
Part 3. Aging Effects	I, 475
Determination of Total Moisture in	III, 340
Effect of, on Physical Properties of Rubber	I, 458
Evaluation of	II, 237
Grit in	V, 475
Moisture Content of	III, 185
Role of Oxygen in	III, 122
Rubber Insulating Compounds in	III, 733
Some Observations on	III, 111
Some Properties of	III, 418
Stock, Stress, and Strain Properties of	IV, 404
Study of Its Volatile Constituents	I, 485
Surface Chemistry of	VIII, 483
Tinting Strength of	IV, 569
Carbon Content of Hard Rubber	I, 350
Carbon Dioxide, Law of Absorption of	V, 604
Carbon, Free, Determination of	X, 635
Carbon Reinforcement of Rubber Part 1. Its Course	X, 395
Part 2. Its Cause	X, 400
Catalytic Phenomena Associated with Autoöxidation of Rubber	V, 301
Catalysts, Influence on the Reaction of Sulfur and Unsaturated Compounds of	VIII, 225
Oxidation with Gaseous Oxygen in Presence of	VIII, 335
Causes of Discoloration in Preserved Latex	VII, 433
Cause of Aggregation and Poor Dispersion of Oxide of Iron in Rubber	V, 187
Cause of Variability in the Plasticity of Plantation Rubber after Storage	V, 219
Cellulose, Long Spacings of Rubber and	IV, 213
Cements	
Dilute Rubber	X, 255
Nonsolvents in Rubber	X, 186
Self-Vulcanizing	IX, 38
Solvents Which Lower Viscosity	I, 428

	Volume and Page
Viscosity of Thick	III, 701
Chain Length of Natural and Synthetic Rubber	VII, 34
Change of Electrical Properties of Rubber and Gutta-Percha during Storage under Water	IV, 39
Change of Volume of Rubber on Stretching: Effects of Time, Elongation, and Temperature	X, 412
Channel Black, Impact Resilience in Testing of	X, 807
Channel Gas Black, Dispersion of	VIII, 470
Characteristic Properties of Rubber at Low Temperatures. A Discussion of the Stress-Strain Curves of Vulcanized Rubber at Low Temperatures	VII, 610
Chart for the Estimation of Equivalent Cures	II, 471
Chemical	
Adsorption Studies of Rubber Fillers and Rubber Compounds	III, 229
and Physical Properties of Zinc Oxide	VI, 549
Aspects of Vulcanization	X, 203
Changes in Rubber and Fatty Oils	II, 576
Constitution and Physical Properties of Rubber	II, 365
Reactions in Rubber Compounds. (I) Reactions between Pine Tar and Litharge	II, 567
Resistance of Rubber as an Engineering Material	VI, 1
Testing Methods	X, 361
Unsaturation of Rubbers Vulcanized with Polynitro Compounds and Benzoyl Peroxide, and Its Possible Bearing on Vulcanization	I, 101
Chemistry of Soft Rubber Vulcanization.	
Part 1. Measurement of Vulcanization.	VII, 89
Part 3. Comparison of Vulcanized Rubber with Unmilled Crude Rubber, Reclaims and Unvulcanized Stocks Containing Stiffeners or Gas Black	VII, 538
Part 4. Vulcanizing Agents Other than Sulfur	VII, 688
Part 5. Treatment of Dilute Rubber Cements with Sulfur Chloride	X, 255
Chilled Iron Rolls in the Rubber Industry	I, 369
Chlorinated Latex	VIII, 613
Chlorinated Rubber	IX, 311
Chlorinated Rubbers, Expanded	VIII, 616; X, 798
Chlorinated Rubbers from Latex	VII, 320; VIII, 613, 622
Chlorination	
of Disaggregated Rubber	VIII, 371
of Polymers of Chloroprene Rubber	X, 467
Processes, Hydrochlorination and	VII, 320
Chloroform-Soluble Substances, Determination of	IV, 517
Chloroprene	
and Its Polymers, a New Synthetic Rubber	V, 7
Homologs of	VI, 115
Plastic Polymers, Rate of Vulcanization of	VI, 389
Rubber, Polymers of	X, 467
Synthetic Rubber (Sovprene)	IX, 383
Classification	
of Principal Accelerators	II, 356; III, 38
Scheme for Accelerator	I, 410
Clay as a Rubber Filler	VI, 469
Clays, Behavior of	III, 743
Cleavage of Rubber, Ozone	IX, 558
Coagulant, Sulfuric Acid as Latex	VI, 415
Coagulation	
of Hevea Latex	III, 310, 353
of Hevea Latex, Natural	III, 254
of Latex	IX, 437
Coating(s)	
Anode Process for Rubber	VI, 537
and Impregnation of Textiles with Latex	IX, 116
for Latex Containers	I, 486
of Textiles with Latex	IX, 116
Coefficient(s)	
of Friction between Rubber and Other Materials; Part 1	III, 67
Gripping Friction of Rubber Belting; Part 2	III, 286
of Friction of Rubber	VIII, 441
of Vulcanization, Temperature	II, 505; V, 192; X, 792
Coherent Expanded Aerogels	V, 600
Colloidal Changes during Rubber Vulcanization	VIII, 102
Colloidal	
Chemical Changes in Rubber and Fatty Oils	II, 576
Nature of Rubber, Gutta-Percha, and Balata	III, 586
Solutions of Rubber	V, 626
Solutions of Rubber, Nature of	III, 596
Structure of Rubber in Solution	X, 643
"Zinc Oxide"	X, 309
Colloids	
Elastic	VII, 273
Elastic Properties of	II, 301
Formation of Thin Films	III, 245
Color(s)	
of Latex, Determination of	I, 132
of White Rubber	III, 615
Organic Rubber	II, 99
Reactions in Rubber	I, 361
Reactions of Rubber and Gutta-Percha	II, 193; III, 22
Combined Action of Organic Accelerators	I, 402

	Volume and Page
Combustion of Rubber, Gutta-Percha, and Balata	III, 24
Combustion of Rubber, Heats of	VIII, 44
Comments [on Rubber Production]	IX, 165
Components of Hevea Latex. Part 1. The Isolation and Quantitative Determination of the Components	X, 1
Composition of Rubber Globules in Hevea Latex	IX, 551
Compounding, Fatty Acid Softeners in	VIII, 571
Compounding, Modern	VII, 641
Compressibility of Rubber	III, 555
Compressibility of Rubber-Sulfur Compounds	VIII, 401
Compressible Material, Essentials for Accurate Gauging for	II, 539
Compression	
of Rubber	III, 523
Rubber Compounds Flexed under	VII, 125
Rubber in	X, 768
-Set and Some Special Tests of Automotive Rubber Parts	III, 452
Stress of Rubber	VI, 126
Testing of Automotive Rubber Parts Assembled under	III, 431, 452
Concerning the Alleged Absorption of Gaseous Nitrogen by Benzene Solutions of Rubber and Gutta-Percha Hydrocarbons	X, 254
Condensation	
between Polysulfides and Hydrocarbons and Ethers	IX, 373
Products of Aminophenols with Aldehydes	III, 51
Products of Rubber Hydrocarbons	V, 110
Conductivity of Compounds of Purified Rubber and Sulfur	VII, 342
Conductivity of Rubber-Sulfur Compounds	IX, 449
Constitution of Inorganic Rubber	X, 465
Constitution of Rubber	III, 494; IV, 206, 368
Constitution of Rubber and the Nature of Its Viscous Solutions	VIII, 375
Constitution of Rubber According to Its Swelling in Liquids	III, 576
Consumers' Crude Rubber Requirements	IX, 146
Consumption of Accelerator during Vulcanization	II, 551
Contribution to the Problem of the Impregnability of Cord Threads with Rubber	V, 685
Contribution to the Study of the Vulcanization Reaction	IX, 201
Contribution to the Thermochemistry of Rubber	II, 259
Contributions to the Analysis of Rubber. Part 1. Determination of the Water-Soluble Components in Rubber	X, 574
Conversion of Rubber into Thermoplastic Products with Properties Similar to Gutta-Percha, Balata, and Shellac.	
Part 1. Methods of Preparation and General Properties	I, 1
Part 2. Chemistry of the Reaction	I, 11
Cooling Water	
Factors in Supply and Use of	I, 364
Sources and Application of	I, 367
Cord Threads, Impregnability of	V, 685
Correlation between Geer Oven and Natural Aging of Selected Tire Compounds	III, 175
Correlation of Various Aging Tests with Natural Shelf-Aging	III, 169
Corrosive Action of Sulfur against Metallic Copper during Vulcanization	IX, 281
Copper	
and Manganese, Microanalysis of	VI, 510
Antioxidants in Rubber Containing	IV, 108
Compounds, Source of Danger of Fire	I, 288
Content of Crude Rubber	VIII, 86
Corrosive Action of Sulfur against	IX, 281
during Vulcanization, Action of Sulfur against	IX, 281
in Fabrics, Determination of	V, 356
Salts, Action on Raw Rubber	VII, 618
Cotton Contained in Rubber Goods, Aging of	III, 53
Cracking	
of Hydrorubber	V, 131
of Rubber, Hydrogenation-	VIII, 360
of Vulcanized Rubber, Surface	VIII, 58
Test for Tire Tread Compounds, Fatigue	IX, 178
Cracks, Atmospheric	IV, 490; VI, 33
Crepe, Softening and Freezing of	IX, 7
Crepe Rubber, Defects in	III, 264
Crepe Soling, Tests on	X, 500
Crotonaldehyde	V, 192
Crude Rubber	
Effect of Storage on Milled	IV, 417
Plasticity Determinations in	I, 291
Reclaims	VII, 538
Requirements	IX, 146
Unknown Components of	VIII, 86
Variation	VII, 525
Cryoscopic Measurements of Rubber Solutions	III, 487; IV, 201
Crystalline Forms of Rubber Hydrocarbon	X, 135, 393
Crystalline Rubber Hydrocarbon	V, 119
Crystallization of Gel Rubber	VIII, 214
Crystallization of Pure Ether-Soluble Rubber Hydrocarbon	VI, 351
Crystallization of Sulfur from Solutions	VIII, 250, 499
Crystallized Rubber	V, 245; X, 242
Crystals and Fused Substance in Stretched Rubber	IX, 52
Cure(s)	

	Volume and Page
and Aging, Effect of Ferric Sulfate on	V, 179
Chart for Estimation of Equivalent	II, 471
Evaluation of Variable Temperature	I, 423
T-50 Test for State of	VI, 525
Cutting	
Resistance of Anisotropic Rubber Sheets to	VII, 289
Test for Tire Tread Stocks	IX, 520
Cyclorubber, Isomerization of Rubber to	II, 161
Decomposition	
Bacterial	IX, 633
of Natural and Artificial Rubber, Thermal	VI, 64
of Rubber in Hevea Latex, Bacterial	IX, 633
of Rubber by Acids	X, 445
Ozone of Rubber and Sodium-Butadiene Rubber	VIII, 39
Defects in Smoked Sheet and Crepe Rubber	III, 264
Deflection under Compression	III, 431
Deformation(s)	
Mechanical	IV, 54
Plastic	X, 64
Relationship between Forces and	III, 62
Degradation	
of Rubber Solutions	VII, 632
of Rubber Solutions as a Function of Time at Different Temperatures	IV, 505
of Rubber Solutions, Influence of Oxygen on	VI, 111
of Rubber Solutions, Law of	IV, 505
of Rubber Solutions of Different Concentrations	V, 121
of Rubber Solutions, Limiting	VI, 376
Delayed-Action Accelerators	VII, 417
Depolymerization	
during Heat-Aging	X, 164
of Rubber and Gutta-Percha Hydrocarbon	VI, 92
Deposition of Latex on Porous Molds	IV, 437
Deproteinized Rubber	X, 279, 288
Derivatives of Rubber, New	I, 177
Destructive Distillation	
of Natural Rubber	II, 441
of Ebonite	V, 530
of Sodium Rubber	V, 1
Deterioration	
of Ebonite	III, 618
of Raw Rubber by Manganese Contamination	IX, 143
of Rubber, Some Factors in	VI, 345
Determination of Alkalinity of Reclaimed Rubber	IV, 273
Determination of Chloroform-Soluble Substance of Vulcanized Rubber	IV, 517
Determination of Color of Latex	IX, 132
Determination of Diarylamines in Rubber Compositions	X, 383
Determination of Free Carbon in Rubber Goods	X, 635
Determination of Free Sulfur by Titration	IX, 318
Determination of Free Sulfur by a Volumetric Method. Part 2	VI, 512
Determination of Free Sulfur in Rubber	IX, 514
Determination of Free Sulfur in Rubber.	
Part 1. Iodometric Method of Determination of Free Sulfur	VIII, 87
Part 2. Oxidation of Free Sulfur with Permanganate	VIII, 88
Determination of Free Sulfur in Rubber Containing Mercaptobenzothiazole and Tetramethylthiuram Disulfide	IX, 511
Determination of Free Sulfur in Soft Vulcanized Rubber by a Volumetric Method	V, 360
Determination of Guanidines in Rubber Stocks and Consumption of Guanidines during Cure	IX, 661
Determination of Iodine Number of Raw Rubber	II, 362
Determination of Optimum Vulcanization by Means of the Residual Elongation	VIII, 548
Determination of pH of Ammonia Latex	IV, 264
Determination of Plasticity	VI, 236
Determination of Rubber in Rubber-Bearing Plants	VII, 111
Determination of Rubber in Soft Vulcanized Rubber	I, 211
Determination of Serum Components in Raw and Vulcanized Rubber	X, 716
Determination of the Size, Form, and Solvation of Macromolecules	VI, 101
Determination of Sulfur in Rubber by Means of the Calorimetric Bomb	V, 216
Determination of Sulfur in Rubber.	
Use of Tetrahydroxyquinone as a Titration Indicator	X, 378
Determination of Sulfur in Rubber Compounds.	
Part 1. Precipitation of Barium Sulfate in the Presence of Picric Acid	IX, 648
Part 2. Sources of Error in the Determination of Free Sulfur in Rubber Compounds Containing Rapid Accelerators and Sulfur-Bearing Accelerators	IX, 656
Determination of Sulfur in Rubber by the Perchloric Acid Method	II, 45
Determination of the Composition of Pure Ether-Soluble Rubber Hydrocarbon	VI, 361
Determination of Total and Free Selenium in Vulcanizates	IX, 167
Determination of Total Moisture in Carbon Blacks	III, 340
Determination of True Free Sulfur in Vulcanized Rubber. A Modification of the Thiocyanate Method	IX, 172
Diarylamines in Rubber Compositions	X, 383
Diazoamino Compounds, Vulcanization by	X, 471
Dielectric Constant of Purified Rubber-Sulfur Compounds	VII, 342
and Power Factor of Vulcanized Rubber	V, 367

	Volume and Page
of Rubber-Sulfur Compounds	IX, 449
Dielectric Polarizations of Rubber Solutions	X, 105
Diffraction	
of Electrons by Rubber	IX, 585
of X-rays by Old Specimens of "Frozen" Rubber	X, 462
Studies by X-ray	VII, 503
Diffusion of Water	
in Rubber	X, 673
through Organic Insulating Materials	VIII, 297
through Rubber	II, 323
Diffusion Process in Rubber, Nature of	X, 673
2,3-Dimethylbutadiene-1,3	V, 546
Dimethyloctadiene	II, 453
Diphase Rubber. The Diphase-Forming Tendency of Rubber as Shown by the Action of Pigments	VI, 442
Diphenylguanidine and Benzothiazyl Disulfide, Combined Use of	VII, 648
Diphenylguanidine and Mercaptobenzothiazole	V, 657
Dipole Moment of Purified Natural Rubber	IX, 296
Direct Determination of Rubber in Soft Vulcanized Rubber	I, 211
Disaggregated Rubber, Chlorination of	VIII, 371
Discoloration in Preserved Latex	VII, 433; IX, 486
Dispersing Agents	
Effect of	VIII, 470
for Latex Mixtures, Investigations of	IX, 252, 544
Dispersion	
of Channel Gas Black in Rubber, Effect of Stearic Acid and Other So-called Dispersing Agents	VIII, 470
of Gas Black and the Physical Properties of Rubber Mixtures	IV, 29
of Oxide of Iron in Rubber	V, 187
Dispersion of Pigments in Rubber. Part 1	I, 441
Part 2	II, 656
Dispersoidological Investigations. XXIII. Contributions to the Dispersoidology of Rubber. Part 1. The Structure of Jellies and of Other Coagula of Ammonia-Preserved Hevea Latex and Hevea Vultex	II, 108
Dissolved Rubber, Ultra-Violet Light on	IX, 570
Distillation	
Destructive	II, 441; IV, 1
of Ebonite, Destructive	V, 530
of Natural Rubber, Destructive	II, 441
of Sodium Rubber, Destructive	V, 1
Disulfide Accelerators of Vulcanization	X, 158
Dithiocyanogen, Behavior of Rubber with	IV, 399
Double Refraction of Stretched Rubber	II, 545
Double-Texture Rubber Goods	III, 531
Dried Rubber, Solution Properties of	VII, 297
Drift, Preliminary Study of After-Effect or	X, 224
Drives, Electric Motor	II, 528
Drying, Effect on Aging of Sheet Rubber	IX, 545
DuPrene Compounds	
Effect of Oils and Chemicals on	VII, 393
Physical Properties of	VII, 406
See also Neoprene	
Early Stages of Oxidation in Rubber. A Qualitative Application of the Pyrrole Test	IV, 126
Ebonite	
Adhesion to Metal	IX, 605
Brittleness	X, 778
Destructive Distillation	V, 530
Deterioration	III, 618
Internal Heating	IX, 444
Semi-Ebonite	VIII, 554; IX, 468
Stress-Strain Relationship in	VII, 197
Structural Formula	VII, 520
Effect of Addition of Colloids on Coagulation of Latex	IX, 437
Effect of Antioxidants in Typical Rubber Stocks	II, 456
Effect of Cadmium Compounds on Typical Organic Accelerators during Vulcanization	V, 393
Effect of Certain Metallic Salts on the Aging of a Tread Compound	I, 97
Effect of Conditions of Drying on the Aging Properties of Sheet Rubber. Part 1	IX, 545
Effect of Curing Temperature on Properties of a Rubber-Sulfur Mix	IV, 100
Effect of Curing Temperature on Quality of Vulcanized Rubber	V, 442
Effects of Elastic Stretch on the Infrared Spectrum of Rubber	X, 697
Effect of Grit on Stress and Strain Properties of a Carbon Black Stock	IV, 404
Effect of Heat on Raw Rubber	I, 193
Effect of Heat on Raw Rubber in Presence and Absence of Air	I, 299
Effect of High *vs.* Low Sulfur in Vulcanizing Reclaim	I, 70
Effect of Increased Quantities of Stearic Acid on Tread Abrasions	II, 623
Effect of Oils and Chemicals on DuPrene Compounds	VII, 393
Effect of Overmilling on Compounded Rubber	V, 671
Effect of Oxygen Absorbers in Rubber	IX, 322
Effects of Ozone on Stretched Rubber	I, 120
Effect of Particle Size of Zinc Oxide on the Physical Properties of Rubber	VI, 288
Effect of Pigment Particle Size on Some Physical Properties of Rubber Compounds	IX, 597
Effect of Pigmentation on the Work of Retraction of Rubber Compounds	III, 764
Effect of Pigments in Rubber	V, 326
Effect of Precipitating Agent on Solvated Particles of Rubber	V, 627

	Volume and Page
Effect of Pressure on the Dielectric Constant, Power Factor, and Conductivity of Rubber-Sulfur Compounds	IX, 449
Effect of Simple Carbohydrates on the Vulcanization of Rubber	V, 636
Effect of Repeated Reclaiming of Rubber	II, 81
Effect of Solvents on the Stress-Strain Curve of Vulcanized Rubber	III, 19
Effect of Stearic Acid on Reclaimed Rubber	II, 627
Effect of Stearic Acid on Various Crude Rubbers	II, 611
Effect of Storage on Milled Crude Rubber	IV, 417
Effect of Surface-Active Substances and Electrolytes on the Crystallization of Sulfur from Rubber Solutions	VIII, 250, 499
Effect of Temperature and Frequency on the Dielectric Constant, Power Factor, and Conductivity of Compounds of Purified Rubber and Sulfur	VII, 342
Effect of Temperature on the Plasticity of Rubber	VII, 265
Effect of Temperature on Stress-Strain Properties of Vulcanized Rubber	II, 1
Effect of Temperature on Tensile Properties of Vulcanized Rubber	VII, 371
Effect of Various Types of Carbon Black on Certain Physical Properties of Rubber Compounds	I, 458
Effect on Vulcanized Rubber Compounds of Immersion in Boiling Water	IV, 426
Elastic	
Behavior of Vulcanized Rubber	VI, 217
Colloids	
Physical Structure of	VII, 273
Hysteresis and Increase in Tensile Strength at Low Temperatures	VIII, 522
Phenomena in Rubber	VIII, 395
Properties of Colloids	II, 301
Elasticity	
and Plasticity	I, 393; VI, 495; IX, 55
Constants of Rubber under High Tensions	V, 676
of Rubber	VIII, 319
Electric Motor Drives for Rubber Machinery	II, 528
Electric Properties of Rubber and Gutta-Percha during Storage under Water	I, 39
Electrical Insulation	X, 474
Electro-Deposition	
Making Goods from Latex by	II, 278
of Rubber from Latex	V, 232
of Rubber from Revertex and Revultex	VI, 422
or Rubber on a Zinc Anode	VII, 314
Electrolytes	
Effect on Crystallization of Sulfur	VIII, 250, 499
Electron(s)	
Diffraction, Structure of Rubber by	IX, 409, 585
Rays, Studies with	VII, 603; VIII, 1
Elongation(s)	
Aging of Vulcanized Rubber under Varying	III, 131
Effects of	X, 412
of Soft Rubber	VI, 520
Stress-Strain Curves at Low	III, 689
End Groups in Rubber	V, 263
Energy	
Between Rubber and Fillers, Surface	III, 215
Transformation of	III, 74
Engineering Material, Rubber as	VI, 1
Entropy and Free Energy of Rubber Hydrocarbon	IX, 264
Equipment, Rubber-Lined	IX, 564
Errors in Tensile-Strength Testing	X, 180
Essentials for Accurate Gauging of Compressible Material	II, 539
Estate Practice and Its Relation to Factory Requirements	VII, 1
Estimation of the Degree of Penetration of Rubber into Fabrics	III, 328
Ether-Insoluble or Gel Rubber Hydrocarbon, Its Solution, Crystallization, and Properties.	
I. Preparation and Crystallization of Gel Rubber Hydrocarbon	VIII, 214
II. Microscopical Study of the Dissolved and Crystallized Gel	VIII, 218
Ether-Soluble Rubber Hydrocarbons	VI, 351, 361
Ethers, Condensation between Polysulfides and Hydrocarbons	IX, 373
Ethylation, Isoprene	III, 483
Evaluation	
of Carbon Blacks	II, 237
of Raw Rubber	IV, 299
of Reclaimed Rubber	VIII, 597
of Rubber and Rubber-Like Compositions as Vibration Absorbers. Apparatus for Automatic Recording	X, 827
of Variable-Temperature Cures	I, 423
Some Practical Aspects of Rubber	II, 406
Evolution of Heat During Vulcanization	X, 725
Evolution of Hydrogen Sulfide from Vulcanized Rubber	III, 386
Examination of Rubber Latex and Rubber Latex Compounds. I. Physical Testing Methods	X, 615
II. Chemical Testing Methods	X, 361
Expanded Aerogels	V, 600
Expanded Chlorinated Rubber	VIII, 616; X, 798
Expansivity of Rubber-Sulfur Compounds	VIII, 401
Experiences with a Direct Accelerator-Adsorption Test	V, 429
Experiences with Mixing Mill Roll Speeds and Speed Ratios and Batch Sizes	I, 388
Experiments on Electro-Deposition of Rubber from Latex	V, 232
Experiments on Oil-Proof Rubber	VI, 278

	Volume and Page
Experiments on the Autoöxidation of Rubber and the Catalytic Phenomena Which Are Associated with It	V, 301
Experiments on the Causes of Deterioration of Ebonite When Exposed to Light and Air	III, 618
Extraction Apparatus for Samples of Rubber	VII, 599
Extrusion Plastometer. A Simplified	IX, 496
Extrusion Qualities of Rubber. Effect of Temperature and Mill-Roll Opening	X, 801
Fabrics	
Copper in	V, 356
Penetration of Rubber into	III, 328
Spots on Rubberized	V, 363
Factice in Rubber Manufacture, Use of	IX, 621
Factors Affecting Rate of Vulcanization of Chloroprene Plastic Polymers	VI, 309
Factors in Processing Reclaimed Rubber	I, 59
Factors in Supply and Use of Cooling Water	I, 364
Factors in Works Control of Plasticity by the Williams Method	III, 293
Factory Mixed Stocks. Method for Maintaining Uniformity	V, 705
Factory Requirements, Estate Practice and Relation to	VII, 1
Falling Cylinder, Measurement of Viscosity of Thick Cements	III, 701
Fatigue	
Cracking Test for Tire Tread Compounds. Some of the Laws of Fatigue	IX, 178
in Rubber. Part 1	X, 29
Laws of	IX, 178
New Machine for Laboratory Evaluation of	VII, 125
of Rubber Compounds	VII, 125
Fatty Acid Softeners in Rubber Compounding	VIII, 571
Fatty Acids in Rubber Compounds	III, 612
Fatty Oils, Colloidal Chemical Changes in Rubber and	II, 576
Ferric Sulfate, Effect on Aging of Rubber	V, 179
Fibering of Rubber. Time Lag and Its Relation to Rubber Structure	VII, 505
Fillers	
Chemical Adsorption	III, 229
Inactive and Active	IV, 24
in Rubber Stocks, Titanium	VI, 106
Interfacial Relationships between Rubber and	VI, 325, 465, 469
Reinforcement of Rubber by	II, 21
Surface Affinity of Rubber for	VI, 263
Surface Energy between Rubber and	III, 215
Thermodynamic Theory of	II, 275
Films	
and Threads, Plastic Materials for	VIII, 632
of Organic Colloids on Mercury Surfaces	III, 245
Preparation of Thin	X, 639
Fine Structure of Crystallized Rubber	X, 242
Fire, Copper Compounds as Sources of Danger of	I, 288
Flex-Cracking Resistance, Laboratory Evaluation of	IV, 134
Flexibility, Tire Design with Relation to	II, 479
Flexing	
Machine, a New	II, 525
Resistance of Vulcanized Rubber	V, 457
Resistance to	V, 90
Test for Tire-Carcass Stocks	III, 333
Tests in Investigating Pneumatic Tire Carcass	III, 544
Flexometer, Heat Generation and Anisotropy of Rubber Compounds in the	IX, 608
Forms of Rubber as Indicated by Temperature-Volume Relationship	VIII, 5
Formation of High Polymers by Condensation between Metallic Polysulfides and Dihalogenated Hydrocarbons and Ethers	IX, 373
Formation of Sulfur from Hydrogen Sulfide and Sulfur Dioxide. A Contribution to the Vulcanization Process of Peachey	VII, 637
Formation of Thin Films of Organic Colloids on Mercury Surfaces	III, 245
Fractionation	
Balata	III, 511
Hydrorubber	V, 131
Rubber	II, 367; V, 278
Fractions, Diffraction Studies of Rubber	VII, 503
Free Carbon, Determination of	X, 635
Free Energy of Rubber Hydrocarbon	IX, 264
Free Sulfur	
Determination	
Titration	IX, 318
Volumetric	V, 360; VI, 412, 512, 518
in Rubber	VIII, 87; IX, 514
in Rubber Containing Rapid Accelerators and Sulfur-Bearing Accelerators	IX, 656
in Soft Vulcanized Rubber by Volumetric Method	V, 360
of True	I, 172
in Vulcanized Rubber	IX, 172
Influence on Aging	V, 655
Freezing	
of Crepe	X, 7
of Raw Rubber	II, 378
Frequency, Effect on Dielectric Constant, Power Factor, and Conductivity	VII, 342
Friction	
between Rubber and Other Materials	III, 67, 286; VII, 67

	Volume and Page
of Rubber Belting	VI, 286
of Rubber, Coefficient of	VIII, 441
Frictional Contacts of Rubber with Other Materials	VI, 345
"Frozen" Rubber, Diffraction of X-Rays by Old Specimens of	X, 462
Fundamentals in the Problem of Resistance to Deterioration	VI, 193
Fundamental Studies on the Nature of the Action of Organic Accelerators of Vulcanization.	
I. Action of Organic Accelerators on Rubber Sols	VI, 273
II. Special Properties of Organic Accelerators (1)	VI, 396
III. Special Properties of Organic Accelerators (2). Action of Ostromislensky's Vulcanizing Agents on Rubber Sols	VI, 400
IV. Detection and Analysis of Organic Accelerators, Systematic Identification of Organic Accelerators	VI, 507
VI. Detection and Analysis of Organic Accelerators (3). Analysis of Water-Soluble Ultra-Accelerators and a New Colorimetric Method for the Microanalysis of Copper and Manganese	VI, 510
VII. Effect of Heat on Surface Tension of Rubber Solutions	VIII, 69
X. Action of Organic Acids on Rubber Sols	VIII, 73
XI. Peculiarity of Some Accelerators toward Rubber Sols	IX, 291
XII. Action of Organic Bases on Rubber Sols	IX, 15
XIII. Action of Organic Acids on Rubber Solutions	IX, 17
XIV. Supplement to "Observations on the Behavior of Organic Accelerators toward Rubber Solutions"	IX, 294
Further Studies of Rubber Solutions	V, 608
Further X-Ray Studies of Gutta-Percha and Balata	IV, 445
Fusion Curve of Natural Rubber	IV, 211
Gas Black	
Channel	VIII, 470
Dispersion	IV, 29; VIII, 470
Effect on Rubber	V, 146
in Unvulcanized Stocks	VII, 538
Gasoline, Production of, by Hydrodepolymerization of Rubber	IX, 589
Geer Oven Aging and Natural Aging	III, 175
Gel Rubber	
Hydrocarbon	VIII, 214
Hydrocarbon, Stress-Strain Behavior of	VIII, 210
Preparation from Pure Rubber	I, 167
Separation of Sol and	X, 641
Gel Solutions of Rubber	X, 432
Globules in Hevea Latex	IX, 551
Gold Reaction of Products of Initial State of Oxidation of Rubber	VII, 18
Goodrich Plastometer, Simplified	III, 295
Goodyear Experience in Temperature Control of Mill Rolls	II, 251
Graphical Tensile-Testing Machine for Rubber Threads	IV, 456
Grit, Effect on Stress and Strain Properties of Carbon Black	IV, 404
Grit in Carbon Black. Effect on Flexing Resistance of Vulcanized Rubber	V, 457
Guanidines in Rubber Stocks	IX, 661
Guayule, Scientific Advances	I, 357
Gutta-Percha	
and Balata	I, 11
β-Modification	I, 587
Change of Electrical Properties	IV, 39
Colloidal Nature	III, 586
Color Reactions of Rubber and	II, 193; III, 22
Effect of Vulcanization on Its X-Ray Diagram	X, 137
Heats of Combustion	III, 24
Hydrocarbons	
Benzene Solutions	X, 254
Iodine Value	VII, 576
Modifications	V, 287; VI, 86
Oxidation	V, 51
Refractometry	VI, 92
Latex, Stability of Abiarana	X, 272
Oxidation	V, 587
Polymorphism	VI, 76
Structure	VII, 603
Thermoplastic Products Similar to	I, 1, 11
X-Ray Studies	IV, 75, 445
Hard Rubber	I, 137
Accelerators in	VIII, 75
Carbon and Hydrogen Content	IX, 350
Properties of	X, 64, 532
Reactions. Parts 3, 4, 5	X, 153, X, 787, 792
Hard Spots in Vulcanized Rubber Compounds	IV, 256
Hardness of Vulcanized Rubber at Low Temperatures	X, 55
Hardness Testing of Rubber	IX, 83
Heat (s)	
Capacity, Entropy, and Free Energy of Rubber Hydrocarbon	IX, 264

	Volume and Page
Changes in the Vulcanization of Rubber. 1. Qualitative Tests on a Comparative Basis	VIII, 514
Effect on Raw Rubber	I, 193, 299
Evolution during Vulcanization	X, 725
Generation and Anisotropy of Rubber Compounds in the Flexometer	IX, 608
Generation of Pigmented Rubber Compounds	VIII, 138
in Raw Rubber in Presence and Absence of Air	I, 299
of Combustion of Rubber and of Rubber-Sulfur Compounds	VIII, 44
of Combustion of Rubber, Gutta-Percha, and Balata	III, 24
of Reaction during Vulcanization	IV, 514
of Reaction of the System Rubber–Sulfur	VIII, 456
of Swelling of Rubber and Its Relation to the Previous History of the Rubber and to the Nature of the Swelling Agent	VII, 462
of Vulcanization	IV, 190, 507
Reaction during Vulcanization	III, 384
-Resisting Inner Tube Stocks	V, 409
Transfer in the Vulcanization of Rubber	II, 32
Treatment and Polymorphism of Gutta-Percha and Balata	VI, 76
Treatment of Vulcanized Rubber	VI, 225
Heating	
Acetone Extract at 100° C.	VIII, 605
Curves for Vulcanization	VI, 56
of Ebonite, Internal	IX, 444
Hexamethylenetetramine and Mercaptobenzothiazole	IX, 21
High Speed, Tensile Tests at	IV, 147
High-Speed Vulcanization of Rubber	X, 743
Homologs of Chloroprene and Their Polymers (Second paper on new synthetic rubbers)	VI, 115
Hot *vs.* Cold Breakdown of Rubber	X, 195
Hot Vulcanization, Influence of Gaseous Medium on	VIII, 437
Humidity	
Control, Dry Air for	II, 318
Control in Rubber Testing	I, 182, 515; II, 680
Effect of Temperature, Pressure, and	III, 99
Surface Resistivity Affected by Light, Air, and	X, 532
Hydrazines as Rubber Softeners	IX, 339
Hydriodic Acid, Reduction of Rubber with	IV, 365
Hydrocarbon(s)	
Absorption of Gaseous Nitrogen	I, 254
and Ethers, Condensation between	I, 373
Condensation Products of	V, 110
Constituents of Rubber	V, 537, 543
Crystalline Forms of Rubber	X, 135, 393
Crystalline Rubber	V, 119
Heat Capacity, Entropy, and Free Energy of Rubber	VII, 264
of Rubber and Gutta-Percha	V, 51; VI, 92
Raman Spectrum of Some	IX, 275
Sol Rubber	VI, 367
Hydrochlorination and Chlorination Processes	VII, 320
Hydrodepolymerization of Rubber to Produce Gasoline	IX, 589
Hydrogen Chloride, Addition to Vinylacetylene	VI, 121
Hydrogen Content of Hard Rubber	IX, 350
Hydrogen Peroxide	
-Acetic Acid Mixtures, Oxidation of Rubber by	VII, 454
Oxidation of Rubber by	I, 352; V, 587; VIII, 593
Hydrogen Sulfide from Vulcanized Rubber	III, 386; VI, 46
Hydrogenation-Cracking of Rubber	VIII, 360
Hydrogenation of Rubber and Balata	VII, 496
Hydromethyl Rubber	V, 141
Hydrorubber(s)	
Cracking of	V, 131
Gel Solutions	X, 432
Hemicolloidal	IV, 532
High Molecular	V, 136
Homologous Polymeric	IV, 524
in Various Solvents	IX, 579
Molecular Weight of	IV, 543
Hydrosqualene Solutions	IX, 373
Hypochlorous Acid, Action on Rubber	VII, 327
Hysteresis	
and Reinforcement	V, 336
at Low Temperatures	VIII, 522
Impact	
-Cutting Test for Tire Tread Stocks	IX, 520
Machine for Rubber Testing. Determining the Stress-Strain Diagram at High Speed	X, 317
Resilience in the Testing of Channel Black	X, 807
Resiliometer	VII, 591
Importance of Temperature and Humidity Control in Rubber Testing. Progress Report. Part 1. Stress-Strain and Tensile Properties	I, 182 I, 515
Impregnation of Textiles with Latex	IX, 116
Impregnability of Cord Threads with Rubber	V, 685
Improvement on the Williams Abrasion Tester	IX, 502
Impure Iron Oxide as a Rubber Pigment. I. Effect of Ferric Sulfate on Cure and Aging of Rubber	V, 179

	Volume and Page
Inaccuracies in Determination of Acidity of Raw Rubber by Water Extraction	II, 56
Index of Refraction of Rubber	VII, 608
Inflection Point of Stress-Strain Relationships	VII, 486
Influence of Amount of Surplus Liquid on the Swelling Maximum of Rubber Jellies	IV, 64
Influence of Certain Accelerators on the Aging of Rubber	V, 320
Influence of Catalysts in the Reaction of Sulfur on Unsaturated Organic Substances. 1. A Study of Vulcanization at Elevated Temperature	VIII, 225
Influence of Certain Colored Substances on the Autoöxidation of Balata and of Rubber	VIII, 239
Influence of Gaseous Medium on Hot Vulcanization	VIII, 437
Influence of Light on the Color of White Rubber	III, 615
Influence of Mastication on the Oxido-Aging of Rubber. A Comparison with the Influence of Heating	IX, 206
Influence of Oxygen on the Degradation of Rubber Solutions	VI, 111
Influence of Physical Properties of Carbon Black on Its Tinting Strength	IV, 569
Influence of Pigments on Some Physical Properties of Unvulcanized Rubber	III, 87
Influence of Principal Accelerators of Vulcanization on the Preservation of Rubber	III, 207
Influence of Rubber "Resins" in Zinc Oxide-Accelerator Mixings	IV, 156
Influence of Sulfur-Rubber Ratio on the Physical Properties of Hard Rubber	I, 137
Influence of Temperature on the Evolution of Hydrogen Sulfide from Vulcanized Rubber	VI, 46
Influence of Time on the Elongation of Soft Rubber under Constant Load	VI, 520
Influence of Vulcanization on the Index of Refraction of Rubber	VII, 608
Influence of Zinc Oxide on the Action of the Principal Accelerators of Vulcanization. Preparation of Transparent Vulcanized Rubber	IV, 1
Infrared	
Absorption of Rubber and Related Hydrocarbons	X, 120
Applied to Rubber Chemistry	X, 249
Spectrum of Rubber	X, 697
Inner Tube Stocks, Heat-Resisting	V, 409
Inorganic Rubber	V, 585
Constitution of	X, 465
Inorganic Substances with Rubber-like Properties	IX, 422
Insoluble Rubber	V, 278
Insulating Materials, Organic	VIII, 297
Insulating Compounds, Carbon Black in	III, 733
Insulation, Electrical	X, 474
Interfacial Relationships between Rubber and Fillers	VI, 465, 469
Internal Heating of Ebonite during Vulcanization	IX, 444
Internal Protective Coatings for Latex Containers. Their Value in Minimizing Discoloration in Preserved Latex	IX, 486
Investigation of Aging Processes of Rubber.	
I. Effect of Irradiation with Ultra-violet Light on the Surface Tension of Rubber Solutions	VII, 302
II. The Gold Reaction of Products of the Initial State of Oxidation	VII, 18
Investigation of Causes of Spots Which Appeared Spontaneously on Rubberized Fabrics	V, 363
Investigations of Colloidal Solutions of Rubber.	
I. Influence of the Precipitating Agent on Rubber Solutions	V, 626
II. Effect of Precipitating Agent and Influence of Temperature on Solvated Particles of Rubber	VI, 627
Investigations of Dispersing and Stabilizing Agents for Latex Mixtures and the Behavior of Latex Mixtures When Stored	IX, 252, 544
Investigation of the Structure of Rubber by Means of Electron Diffraction	IX, 409
Investigations of Unknown Components of Crude Rubber. Part 1	VIII, 86
Investigation of Visco-Elastic Properties of Rubber	VIII, 177
Investigation of Viscosity of Rubber Solutions	III, 604
Iodine Chloride	
Behavior of Rubber with	IV, 399
in Determination of Gutta-Percha Hydrocarbon	VII, 576
Iodine Number	
of Raw Rubber	II, 362
Method of Kemp for Determination of	VII, 587
Iodine Value of Rubber and Gutta-Percha Hydrocarbons as Determined by Iodine Chloride	VII, 576
Iodometric Method of Determination of Free Sulfur	VIII, 87
Iron Oxide	
as a Rubber Pigment, Impure	V, 179
as a Substance for Increasing the Adhesion of Ebonite to Metal	IX, 605
Iron	
Proöxygenic Role of	VII, 213
Rolls in Rubber Industry, Chilled	I, 369
Isomerization of Rubber to Cyclorubber under the Influence of High Tension Alternating Currents	II, 161
Isoprene	
and Butyraldehyde	III, 472
and Rubber. 13. Constitution of Rubber	III, 494
17. Fractionation of Balata	III, 511
18. Viscosity Studies on Balata:	III, 516
19. Molecular Size of Rubber and Balata	III, 519
20. Colloidal Nature of Rubber, Gutta-Percha, and Balata	III, 586
21. Molecular Size of Rubber and the Nature of Its Colloidal Solutions	III, 596
22. Isorubber Nitrone	IV, 191
23. Cryoscopic Measurements of Rubber Solutions	IV, 201
25. Homologous Polymeric Hydrorubbers	IV, 524
26. Hemicolloidal Hydrorubbers	IV, 532
27. Relations between Viscosity and Molecular Weight of Hydrorubbers	IV, 543
28. Fractionation and Cracking of Hydrorubber	V, 131

	Volume and Page
29. High Molecular Hydrorubbers	V, 136
30. Hydromethyl Rubber	V, 141
32. Reduction of Rubber with Hydriodic Acid	IV, 365
33. End Groups in Rubber	V, 263
34. Molecules or Micelles in a Rubber Solution	V, 265
35. Soluble and Insoluble Rubber and the Fractionation of Rubber	V, 278
37. Homologous Polypranes	V, 576
41. Hydrogenation of Rubber and Balata	VII, 496
44. Viscosity Measurements of Squalene and Hydrosqualene Solutions	IX, 573
45. Viscosity Measurements of Solutions of Rubber and Hydrorubber in Various Solvents	IX, 579
46. Viscosity Measurements of Gel Solutions of Rubber and Hydrorubber	X, 432
47. Decomposition of Rubber by Acids	X, 445
Ethylation, 4-Methyl-4-Octene by	III, 483
Physical Properties	X, 451
from Rubber, Production of	VI, 232
Polymerization of	V, 546; VII, 184
Reduction by $Na\text{-}NH_3$	II, 452
Isorubber Nitrone	II, 373; IV, 191
Java Plantation Rubber, Tensile Strength of	III, 350
Jellies	
in Rubber Solutions	V, 296
Structure of	II, 108
Swelling Maximum of Rubber	IV, 64
Vapor-Pressure, Diminution of	III, 235
Joule Effect	
in Rubber	VIII, 174; X, 231
Rubber Pendulum and	I, 151
Kaysam. A Casting Process for the Manufacture of Rubber Products from Latex	X, 352
Kinetics	
of Vulcanization of Rubber	IV, 164
of Vulcanization with Sulfur and Selenium	II, 650
Knock Rating. Investigation of Gasolines	IX, 589
Koroseal. A New Plastic	VIII, 641
Laboratory	
Evaluation of Flex-Cracking Resistance	IV, 134
Flexing Tests as an Aid in Investigating the Pneumatic Tire Carcass	III, 544
Work. Some New	II, 197
Rubber Testing. Its Relation to Service	V, 692
Lamp, Mercury Vapor Arc	I, 284
Latex	
Abiarana Gutta-Percha	X, 272
Adhesive	VII, 452
Alanine in Rubber	VII, 712
Ammonia-Preserved Hevea	II, 108
and Latex Mixtures, Viscosity of	X, 675
and Rubber Latex Compounds	X, 361, 615
Antioxidants of Rubber	VII, 23
Autoöxidation of Rubber	VI, 378
Bacterial Decomposition of Rubber in	IX, 633
Battery Separators. Preparation and Properties	X, 346
Chlorinated Rubbers from	VII, 320; VIII 613
Coagulant, Sulfuric Acid as	VI, 415
Coagulants Used by Malayan Small-Holders	X, 267
Coagulated with Sulfuric Acid	VIII, 274
Coagulation	III, 353; IV, 310; IX, 437
Coating Textiles with	IX, 116
Components of Hevea	X, 1
Compounded	VI, 473
Containers, Protective Coatings for	I, 486
Contaminated with Copper Compounds as a Source of Danger of Fire	I, 288
Determination of the Color of	IX, 132
Discoloration in Preserved	VII, 433
Electrodeposition of Rubber from	V, 232
Examination of Rubber	X, 361
Films, Physical Testing of	X, 584
for Road Surfacing, Rubber	X, 199
from Porous Molds, Rate of Deposition of	IV, 437
-Insulated Wire	VIII, 635
Kaysam. A Casting Process for Manufacture from	X, 352
Lipin of Hevea	IV, 330
Lipin from Hevea	V, 365
Making Rubber Goods by Electro-Deposition	II, 278
Micromanipulations in the Dark Field	IV, 219
Microturbidimeter for Determination of Rubber Content of	IV, 601
Natural Coagulation of Hevea	III, 254
Natural Stabilizers of	VIII, 130
New Rubber Particle Count in Hevea	VIII, 644
pH of Ammonia	IV, 264
pH Value of	III, 616
Physico-Chemical Properties	VIII, 501

	Volume and Page
Preparation of Pure Rubber from	I, 312
Preservation by Acids	X, 688
Preserved	VIII, 486
Products, Tensile Properties of	VIII, 268
Properties of Vulcanized Rubber Prepared from Compounded	VI, 473
Quebrachitol from Serum of Hevea	III, 1
Rate of Deposition	IV, 437
Recent Scientific and Technical Developments	V, 469
Serum of Hevea	III, 1
Specific Gravity	
of preserved	VIII, 284, 448
of Rubber in	VIII, 443
Stability of Abiarana Gutta-Percha	X, 272
Sticky	VII, 450, 452
Stocks, Physical Testing of	X, 356
Surface Composition of Rubber Globules in Hevea	IX, 551
Swelling of	III, 361; VII, 477
Viscosity of	VII, 634; X, 675
Vulcanization	
by Potassium Ferricyanide	X, 762
Effect of Lipin on	IV, 339
of Rubber	X, 762
Law	
of Absorption of Carbon Dioxide by Rubber as a Function of Time	V, 604
of Degradation of Rubber Solutions as a Function of Time at Different Temperatures	IV, 505
Lead	
Influence on Rate of Cure	V, 39
In Rubber Factory, Recovery of	III, 470
Levulinic Acid Peroxide from Rubber	IV, 381
Light	
Air and Humidity, Surface Resistivity Affected by	X, 532
Influence on Color of White Rubber	III, 615
Polymerization in Presence of	VII, 184
Limiting Degradation of Rubber Solutions	VI, 376
Lipin	
from Latex	V, 365
of Hevea Latex	IV, 330
Litharge	
and Pine Tar, Reactions between	II, 567
an Antioxygen or Proöxygen toward Rubber	VII, 167
Compound. Temperature Coefficient of a	II, 505
-Cured Rubber Compounds	II, 638
The Case of	VII, 167
Long Spacings of Rubber and Cellulose	IV, 213
Low-Sulfur Compounding	VII, 147
Low Temperatures	
Hardness at	I, 55
Increase in Tensile Strength at	VIII, 522
Properties of Rubber at	VII, 610
Lyophilic Sols, Structural Viscosity in	VII, 371
Lubricants, Rubber in	VIII, 629
Machine	
for Laboratory Evaluation of Fatigue	VII, 125
for Rubber Testing, Impact	X, 317
for tensile Testing of Rubber Threads	IV, 456
for Testing Rubber Products Used to Absorb Vibration	I, 503
for Testing Tensile Properties, New Autographic	IV, 591
Electric Motor Drives for	II, 528
Macromolecules, Solvation of	VI, 101
Magnesium Carbonate, Transparency of Rubber Compounds Containing	X, 299
Making Rubber Goods of Latex by Electro-Deposition	II, 278
Manganese	
Contamination, Deterioration of Raw Rubber by	IX, 143
Microanalysis of	VI, 510
Salts in Plantation Rubber	VIII, 305
Masticated Raw Rubber Mixtures	III, 35
Mastication	
A Preliminary Study	V, 153
and Rate of Set-Up. Part 1	X, 508
Influence of	IX, 206
of Rubber	VIII, 388
of Rubber. An Oxidation Process	V, 164
Mathematical Treatment of a Theory of Rubber Structure	VIII, 23
Meaning and Measurement of Plasticity	II, 592
Measurement	
of Average Particle Size of Fine Pigments	V, 202
of pH Value of Rubber Latex	III, 616
of Plasticity of Rubber. A Reply to Dillon and Johnston	VIII, 266
of Quality in Rubber Goods by Physical Tests	VII, 700
of Water Absorption by Rubber	VI, 24
Measuring Microscope for Rubber Specimens	VI, 151
Measuring Temperatures of Calender Rolls	II, 248

Mechanism	Volume and Page
of Oil Resistance of Neoprene	X, 312
of Reinforcement of Rubber by Pigments	II, 216
of Rubber Aging	VII, 387
of Rubber Vulcanization	VII, 693
Mercaptobenzothiazole	
and a Crotonaldehyde-Aniline Condensation Product	V, 192
and Hexamethylenetetramine, Combined Use as Accelerator	IX, 21
and Methyleneaniline	V, 663
and Tetramethylthiuram Disulfide, Free Sulfur in Rubber Containing	IX, 511
Derivatives	X, 329
Diphenylguanidine and	V, 657
Reactions between Zinc Soaps and	V, 384
Mercury Vapor Arc Lamp. Its Use in a Rubber Factory	I, 284
Metal, Adhesion of Ebonite to	IX, 605
Metal Halide Compounds of Some Protective Agents	IV, 239; lxiii
Metallic Oxides	IV, 98
Metallic Salts, Effect on Aging of Tread Compound	I, 97
Method(s)	
for Measuring Quantitatively the Swelling of Vulcanized Rubber in Organic Liquids by Means of a Voluminometer	VI, 406
for Preparing Microsections of Rubbers	IV, 43
for Purification of Rubber and Properties of Purified Rubber	V, 523
for Purification of Rubber Hydrocarbons	I, 163
of Making Microsections of Rubber Stocks	III, 755
of Determining Abrasion with Particular Reference to the Relation between Road Performances and Laboratory Tests	II, 166
3-Methyl-1,3-Pentadiene	III, 626
Methyleneaniline and Mercaptobenzothiazole, Combined Use as Accelerator	V, 663
Methylglyoxal	
Detection of, and Ozone Cleavage of Rubber	IX, 558
Micellar and Molecular Solutions of Rubber	V, 123
Micelles in a Rubber Solution	V, 265
Microanalysis of Copper and Manganese	VI, 510
Micromanipulations of Latex in the Dark Field	IV, 219
Micropress, Temperature Recording	II, 462
Microscope for Rubber Specimens, Measuring	I, 151
Microscopical	
Study of Crystalline Rubber	VI, 335
Study of Dissolved and Crystallized Gel	VIII, 218
Microsections	
of Rubber	IV, 143
Method of Making	III, 755
Microturbidimeter for Determination of Rubber Content of Latex	IV, 601
Mill Rolls, Temperature Control of	II, 251
Milling	
Effect of Stretch, Thickness, and	IV, 576
Power Variables in	I, 383
Minimum of Sulfur Required for Vulcanization. A Résumé	V, 295
Mixers, Open Mill Mixing *vs.* Internal	I, 380
Mixing	
Mill Roll Speeds and Speed Ratios	I, 388
Open Mill	I, 380
Mode of Action of Disulfide Accelerators of Vulcanization	X, 158
Model of Rubber, Spiral	III, 201
Modifications of the Gutta-Percha Hydrocarbon	V, 287
Part 2	VI, 86
Moisture Content of Carbon Blacks	III, 185
Moisture in Carbon Blacks, Determination of Total	III, 340
Modified Rubbers, Research on	VII, 450, 454; VIII, 335, 622
Molecular Polarization of Purified Natural Rubber	VIII, 296
Molecular Size	
of Rubber and Balata	III, 519
of Rubber	III, 596
of Isorubber Nitrone	II, 373
Molecular Solutions of Rubber, Micellar and	V, 123
Molecular Weight	
and Chain-Length of Natural and Synthetic Rubber	VII, 34
of Hydrorubbers	IV, 543
of Sol Rubber	VII, 518
Molecules or Micelles	V, 265
μ-Polychloroprene, Roentgenographic Examination	VI, 113
Multi-Form Plastometer	VII, 130
Natural Aging, Relation between Artificial Aging Tests and	III, 144
Natural and Synthetic Rubber.	
I. Products of the Destructive Distillation of Natural Rubber	II, 441
II. Reduction of Isoprene by Na-NH_3	II, 452
III. Dimethyloctadiene	II, 453
IV. 4-Methyl-4-Octene by Isoprene Ethylation	III, 483
V. Tetramethyloctadiene	III, 485
VI. Pyrolysis of Natural Rubber in the Presence of Metallic Oxides	IV, 98
VII. Fractional Precipitation of Natural Rubber	IV, 547
VIII. Products of the Destructive Distillation of Sodium Rubber	V, 1
IX. Products of Destructive Distillation of Ebonite	V, 530

	Volume and Page
X. Constituents of Rubber Hydrocarbon	V, 537
XI. Constituents of Milled Rubber Hydrocarbon	V, 543
XII. Reversible Vulcanization by Organo-Metallic Derivatives	VII, 516
XIII. Molecular Weight of Sol Rubber	VII, 518
XIV. Structural Formula for Ebonite	VII, 520
XV. Oxygen in Rubber	IX, 74
XVI. Structure of Polystyrene	X, 150
XVII. Separation of Sol Rubber and Gel Rubber	X, 641
Natural Coagulation of Hevea Latex	III, 254
Natural Stabilizers of Latex	IX, 130
Natural *vs.* Artificial Aging	III, 148
Nature of the Diffusion Process in Rubber	X, 673
Nature of Vulcanization. Part 4	II, 421
Part 4 (*continued*)	V, 117
Part 5	V, 645
Neoprene, Oil Resistance of	X, 312
New Autographic Machine for Testing Tensile Properties of Rubber	IV, 591
New Condensation Products of Rubber Hydrocarbons by the Aid of Benzyl Chloride	V, 110
New Derivatives of Rubber	I, 177
New Flexing Machine for Rubber	II, 525
New Machine for Laboratory Evaluation of Fatigue of Rubber Compounds Flexed under Compression	VII, 125
New Physical Test for Vulcanized Rubber	II, 308
New Plastic Material—AXF	IX, 531
New Plastometer	II, 601
New Rebound Resiliometer	X, 820
New Results on the Ozone Decomposition of Natural Rubber and of Sodium-Butadiene Rubber	VIII, 39
New Rubber Particle Count in Hevea Latex	IX, 644
New Tetramethylbutadiene	I, 341
Nitro Compounds	
Rubber Vulcanized with	III, 639
and Benzoyl Peroxide, Rubber Vulcanized with	X, 735
Nitrogen	
Aging in	X, 174
Absorption of Gaseous, by Rubber and Gutta-Percha Solutions	X, 254
Content, Rubbers with Low	II, 431
Nitrone, Isorubber	II, 373; IV, 191
Nonsolvents in Rubber Cements	X, 186
"Normal Aging" of Compounded Rubber	I, 218
Note on Absorption of Oxygen by Sheets of Rubber	V, 597
Notes on Defects in Smoked Sheet and Crepe Rubber	III, 264
Note on Deterioration of Raw Rubber by Manganese Contamination	IX, 143
Note on the Diffraction of X-Rays by Old Specimens of "Frozen" Rubber	X, 462
Note on Preservation of Latex by Acids	X, 688
Note on Rubber Solutions	V, 624
Observations on Chemical Constitution and Physical Properties of Rubber	II, 365
Observations on Coagulation of Hevea Latex	IV, 310
Observations on Effect on Vulcanization of Lipin of Hevea Latex	IV, 339
Oil-Proof Rubber	VI, 278
Oil-Resistance of Rubber. I. Study of the Swelling of Vulcanized Rubber	IX, 70
II. Molecular Polarization and Dipole Moment of Purified Natural Rubber	IX, 296
III. Viscosities and Molecular Polarizations of Rubber Solutions	IX, 593
IV. Mechanism of the Oil Resistance of Neoprene	X, 312
V. Thermal Effects of Vapors on Rubber	X, 708
VI. Polar Properties of Natural and Synthetic Rubber	X, 713
Oil-Resistance, Testing Rubber for	VII, 657
Oil-Resisting Rubber	VII, 234
Oils and Chemicals, Effect on DuPrene Compounds of	VII, 393
Oleic Acids, Stearic and, in Compounding	II, 619
Open Mill Mixing *vs.* Internal Mixers	I, 380
Optimum Vulcanization, Determination of	VIII, 548
Organic Accelerators	
and Problems Connected with Their Use in the Factory	IX, 1
during Vulcanization	V, 393
Organic Rubber Colors	II, 99
Organo-Metallic Derivatives	VII, 516, 520
Ostromislensky's Vulcanizing Agents for Rubber Sols, Action of	VI, 400
Outline of Tentative Standard Laboratory Procedure for the Preparation and Physical Testing of Rubber Samples	III, 179
Overflow during Vulcanization. Its Dependence on Inactive and Active Fillers, and Errors in Previous Calculations of the Specific Gravity of Vulcanizates Resulting from It	IV, 24
Overmilling, Effect of	V, 671
Oxidation	
Effect of Oxygen on Rate of Oxidation	III, 678
in Rubber	IV, 126
Influence on Refractive Exponents of Rubber	VI, 92
of Free Sulfur with Permanganate	VIII, 88
of Rubber at Atmospheric Temperatures	IV, 229
of Rubber by Hydrogen Peroxide	VIII, 352
of Rubber, Gutta-Percha, and Balata with Hydrogen Peroxide	V, 587
of Rubber Mixings	II, 571; III, 563

	Volume and Page
of Rubber Solutions with Gaseous Oxygen in Presence of Catalysts	VIII, 335
of Vulcanized Rubber	II, 341
Process, Mastication an	V, 164
Products of Initial State of	VII, 18
Products of Rubber	VIII, 613
Studies of Rubber, Gutta-Percha and Balata Hydrocarbons	V, 51
Oxides, Pyrolysis in Presence of Metallic	IV, 98
Oxidizability of Rubber, Prooxygenic Role of Iron in	I, 213
Oxido-Aging of Rubber, Influence of Mastication on	VIII, 206
Oxygen	
Absorbers in Rubber, Effect of	VIII, 322
Absorption	II, 390; V, 597
Changes in Rubber by Atmospheric	VI, 157, 566
Ignition of Rubber in	IX, 492
in Rubber	IX, 74
in Rubber, Solubility of	III, 678
Influence on Degradation of Rubber	VI, 111
Oxidation of Rubber with Gaseous	VIII, 335
Pressure, Effect on Aging of	X, 336
Role in Carbon Black of	III, 122
Ozone	
Cleavage of Rubber	IX, 558
Decomposition of Rubber	IV, 386; VIII, 39
Effects on Stretched Rubber	I, 120
Testing, Standardization of	IV, 13
Ozonides of Rubber	X, 114
Paint(s)	
from Rubber, Protective	I, 89
Rubber in	VIII, 627
Vehicles, Rubber in	VII, 486
Parallel-Plate Plastimeter	VIII, 587
Particle Count in Hevea Latex, New Rubber	IX, 644
Particle Size	
of Fine Pigments, Measurement of	V, 202
of Zinc Oxide, Effect of	VI, 288
Effect on Physical Properties of Rubber	IX, 597
Particles of Rubber, Solvated	V, 627
Patent Law Involved in Weiss Patent Litigation	II, 93
Pendulum	
as a Source of Energy for Plasticity Measurement	IX, 626
Rubber	VIII, 151
Penetration of Rubber into Fabrics	III, 328
Perchloric	
Acid Method for Determining Sulfur in Rubber	II, 45
Method for the Determination of Sulfur in Rubber	VII, 730
Performance Tests, Value of	I, 146
Permeability of Rubber to Air. I. Effect of Temperature, Pressure, and Humidity	III, 99
II. Effect of Stretch, Thickness, Milling, Compounding Ingredients, Kind of Crude Rubber, and Temperature of Vulcanization	IV, 576
Permeability of Rubber Mixings	III, 96
Peroxide, Levulinic Acid, from Rubber	IV, 381
Peroxides, Organic, Vulcanization by	III, 195
pH of Ammonia Latex	IV, 264
pH of Rubber Latex	III, 616
Phases, Rubber as a System of Two	III, 397
Phenomena of the Mechanical Deformation of Rubber	IV, 54
Photoelastic Properties of Soft, Vulcanized Rubber	VIII, 183
Physical Properties	
Effect of Various Types of Carbon Black on	I, 458
of Carbon Black	IV, 569
of DuPrene Compounds	VII, 406
of Hard Rubber	I, 137
of Isoprene	X, 451
of Rubber	II, 365; VI, 288
of Rubber Compounds, Effect of Carbon Black on	I, 458; IX, 597
of Rubber Mixtures	IV, 29
of Unvulcanized Rubber, Influence of Pigments on	III, 87
of Zinc Oxide	VI, 549
Physical Structure of Elastic Colloids	VII, 273
Physical Test for Vulcanized Rubber	II, 308
Physical Testing Committee of Division of Rubber Chemistry of American Chemical Society. Importance of Temperature and Humidity Control in Rubber Testing. Part 2	II, 680
Physical Testing	
Methods	X, 615
of Latex Films	X, 584
of Rubber Samples	III, 179
Procedure for Latex Stocks	X, 356
Physical Tests, Measurement of Quality by	VII, 700
Physico-Chemical Properties of Latex and Their Significance in Manufacture	VIII, 501
Picric Acid, Precipitation of Barium Sulfate	IX, 648
Pigments	
Action of	I, 442

	Volume and Page
Average Particle Size of Fine	V, 202
Dispersion of	II, 441, 656
in Rubber	V, 326
Influence on Physical Properties of Unvulcanized Rubber	III, 87
Particle Size	V, 202; VIII, 597
Reinforcement	II, 409
Reinforcement of Reclaimed Rubber	I, 79
Reinforcing Action of	IV, 248
Pigmentation, Effect of	III, 764
Pine Tar and Litharge, Reactions between	II, 567
Piperidine, Accelerators Derived from	VII, 426
Plantation Rubber, Tensile Strength of	III, 350
Plantation Sheet Rubber, Variations in	V, 509
Plantation Studies of Crude Rubber Variation	VII, 525
Plants, Rubber-Bearing	VII, 111
Plastic and Elastic Phenomena in Rubber	VIII, 395
Plastic, Koroseal. A New	VIII, 64
Plastic Material—AXF	IX, 531
Plastic Materials Suitable for Films and Threads	VIII, 632
Plastic Properties of Several Types of Unvulcanized Rubber Stocks at High Rates of Shear	VII, 248
Plastic State	V, 129
Plasticity	
and Elasticity of Rubber	I, 393
and Elasticity, with Special Reference to Unvulcanized Rubber	IX, 55
Changes on Heating	IV, 552
Control by the Williams Method	III, 293
Control, Rubber	VII, 718
Determinations in Crude Rubber	I, 291
Effect of Temperature on	VII, 265
Instrument for Measuring	VII, 136
in the Rubber Industry	IX, 64
Measurement of	II, 592; VIII, 55, 206, 266
Measurements in the Rubber Industry	VI, 244
Measurements, Pendulum as a Source of Energy for	VIII, 626
of Plantation Rubber after Storage	VIII, 219
Relations, Time, and Temperature	II, 607
Some Aspects of	VI, 236
Thixotropy and	IX, 64
Plasticization	
of Rubber	IX, 426
Thermal	IX, 227, 250
Plastimeter, Parallel-Plate	VIII, 587
Plastometer	
Balance	VII, 136
Goodrich	II, 607
Multiform	VII, 130
New	II, 601
Shearing Disk	VII, 564
Simplified Extrusion	IX, 496
Simplified Goodrich	III, 295
Williams	VII, 718
Plioform—a New Molding Resin. Chemical Reactions of Rubber and Plioform	VII, 546
Pneumatic Tire in Heavy Transport	III, 271
Polarization	
and Dipole Moment of Purified Natural Rubber	IX, 296
of Rubber Solutions	IX, 593
Polarizations, Dielectric	X, 105
Polar Properties of Natural and Synthetic Rubber	X, 713
Polychloroprenes	X, 126
Polymerization	
of Bromoprene	VI, 317
of Rubber, Isoprene, and Styrene	VII, 184
Reactions under High Pressure. I. Some Experiments with Isoprene and Butyraldehyde	III, 472
Studies of	V, 546
X-ray Contributions to the Problem of	II, 285
Polymers	
Acetylene	V, 7; VI, 121, 317
Formation by Condensation	IX, 373
Homologs of Chloroprene and Their	VI, 115
in Solution, Properties of Higher	IX, 570
of Chloroprene Rubber	X, 467
Studies of	V, 546
X-ray Spectrography of	IX, 357
Polymorphism of Gutta-Percha and Balata	VI, 76
Polynitro Compounds and Benzoyl Peroxide	I, 101
Polypranes, Homologous	V, 576
Polystyrene, Structure of	X, 150
Polysulfides, Metallic	IX, 373
Porosity in Vulcanized Rubber	IX, 95
Potash Extraction of Vulcanized Rubber	VII, 736
Potassium Ferricyanide, Vulcanization of Rubber Latex by	X, 762

	Volume and Page
Power Factor	
and Conductivity of Compounds	VII, 342
Effect of Pressure on	IX, 449
of Vulcanized Rubber	V, 367
Power Variables in Milling and Mixing Rubber	I, 383
Practical Method for Obtaining Dry Air for Humidity Control in a Rubber Laboratory	II, 318
Precipitation of Natural Rubber, Fractional	IV, 547
Preliminary Study of the After-Effect or Drift in Rubber under Constant Load	X, 224
Preparation and Crystallization of Gel Rubber Hydrocarbon	VIII, 214
Preparation and Crystallization of Pure Ether-Soluble Rubber Hydrocarbon: Composition, Melting Point, and Optical Properties.	
I. Introduction	VI, 351
II. Purification and Crystallization of Rubber Hydrocarbon	VI, 351
IV. Microscopical Study of Crystalline Rubber	VI, 355
V. Determination of the Composition of Pure Ether-Soluble Rubber Hydrocarbon	VI, 361
VI. Acknowledgments	VI, 366
Preparation from Rubber of Plastic Materials Suitable for the Manufacture of Films and Threads	VIII, 632
Preparation of Butadiene	I, 208
Preparation of Chlorinated Rubbers from Latex. Hydrochlorination and Chlorination Processes	VII, 320
Preparation of Pure Rubber from Latex by Means of Alkali, and Its Separation into Sol Rubber and Gel Rubber	I, 167
Preparation of Thin Films	X, 639
Preservation	
of Latex by Acids	X, 688
Influence of Accelerators on Rubber	III, 207
Pressure	
and Humidity	III, 99
Effect on Dielectric Constant, Power Factor, and Conductivity	IX, 449
Principles of Patent Law Involved in the Weiss Patent Litigation	II, 93
Problem of Changes in Rubber Brought about by Atmospheric Oxygen	VI, 157, 566
Problem of the Action of Selenium in Rubber Mixtures	IV, 519
Proolem of the Evaluation of Reclaimed Rubber by Analytical Methods	VIII, 597
Problem Whether Litharge Is an Antioxygen or a Proöxygen toward Rubber. The Practical Consequences	VII, 167
Processing of Rubber	III, 716
Production	
Comments [on Rubber]	IX, 165, 166
of Gasoline by Means of Hydrodepolymerization of Rubber	IX, 589
of Isoprene from Rubber	VI, 232
of Synthetic Rubber in U. S. S. R., Industrial	VIII, 430
Rubber	IX, 154
Proöxygen	
toward Rubber, Litharge a	VII, 167
Concept of	V, 318
Proöxygenic Role of Iron in the Oxidizability of Rubber	VII, 213
Properties of Hard Rubber. I. Plastic Deformation	X, 64
III. Study of Surface Resistivity as Affected by Exposure to Light, Air, and Humidity	X, 532
Properties of Higher Polymers in Solution. III. Action of Ultra-Violet Light on Dissolved Rubber	IX, 570
Properties of Latex-Insulated Wire	VIII, 635
Protective Action of Some Antioxidants. II. Metal Halide Compounds of Some Protective Agents against Aging, with Special Reference to Aldol-Alpha-Naphthylamine	IV, 239, lxiii
Protective Agents	
against Aging	IV, 239, lxiii
toward Sunlight	VI, 391
Protective Paint from Rubber	I, 89
Protein Content, Relation of Water Absorption to	V, 222
Pure Rubber, Preparation of, from Latex	I, 167
Purification	
and Fractionation of Rubber	II, 367
of Rubber Hydrocarbon(s)	I, 163; VI, 351
of Rubber, New Method for	V, 523
Purified Natural Rubber	IX, 296
Purified Rubber	
for Electrical Insulation	X, 474
and Sulfur	VII, 342
Properties of	I, 523
Pyrolysis of Natural Rubber	IV, 98
Pyrrole Test, Qualitative Application of the	IV, 126
Qualitative Determination of Serum Components in Raw and Vulcanized Rubber	X, 716
Qualitative Tests of Heat Changes in Vulcanization	VIII, 514
Quality in Rubber Goods. Measurement of	VII, 700
Quebrachitol from the Serum of Hevea Latex	V, 1
Raman Spectrum of Rubber	VIII, 521
Raman Spectrum of Rubber and Some Related Hydrocarbons	IX, 275
Rapid Method for Determining Sulfur and Ash in Rubber by Ignition of the Rubber in Oxygen	IX, 492
Rate of Combination of Sulfur with Rubber	II, 209

	Volume and Page
Rate of Cure of Reclaimed Rubber	I, 25
Part 2	III, 315
Rate of Deposition of Latex on Porous Molds	IV, 437
Rate of Oxidation of Rubber, Effect of Oxygen on	III, 678
Rate of Vulcanization	II, 209
Rate of Vulcanization of Chloroprene	VI, 309
Ratio, Influence of Sulfur-Rubber, on Physical Properties of Hard Rubber	I, 137
Rationalization of the Hardness Testing of Rubber	IX, 83
Raw Rubber	
Acetone Extraction of	VIII, 607
Acetone Extraction of Rubber	IX, 308
Action of Copper Salts on	VII, 618
and Vulcanized Rubber, Serum Components in	X, 716
Berginization of	III, 33
Determination of Acidity	II, 56
Deterioration by Manganese Contamination	IX, 143
Effect of Heat	I, 193
Evaluation of	I, 299
"Freezing" of	II, 378
Iodine Number	II, 362
Specifications Committee, Report of	II, 335
Rheology of	X, 214
Saponification Value of	VIII, 611
-Sulfur. 2. Heating Curves for Vulcanization	VI, 56
Viscosity of	X, 690
Reactions during Vulcanization	
I. Influence of Zinc and Lead on Rate of Cure of Stocks Accelerated with Tetramethylthiuram Monosulfide	V, 39
II. Reactions between Zinc Soaps and Mercaptobenzothiazole	V, 384
III. Multiple-Accelerator Effect	VII, 103
Reactions of Aniline and Its Homologs as Accelerators of Vulcanization	I, 307
Recent Scientific Advances in Connection with Guayule	I, 357
Reclaim, Vulcanizing	I, 70
Reclaimed Rubber	I, 59; IV, 273
by Analytical Methods	VIII, 597
Behavior of Clays with	III, 743
Determination of Alkalinity of	IV, 273
Effect of Stearic Acid on	II, 627
Evaluation of	VIII, 597
in Tread Stock	II, 517
Pigment Reënforcement of	I, 79
Processing	I, 59
Rate of Cure of	I, 25; III, 315
Rubber Hydrocarbon in	I, 50
Reclaiming of Rubber, Effect of Repeated	II, 81
Reclaims, Unmilled Crude Rubber	VII, 538
Recovering Lead in Rubber Factory	III, 470
Recovery	
Measurement of Williams Plastometer	VII, 718
of Rubber from Uncured Tire, Ply Scrap. Extraction Process	IV, 450
of Soft Materials	VII, 136
Reduction of Isoprene by Na-NH_3	II, 452
Reduction of Rubber Stress-Strain Determinations	II, 668
Reinforcement	
and Stearic Acid	IX, 301
Hysteresis and	V, 336
of Reclaimed Rubber, Pigment	I, 79
of Rubber	V, 291; VII, 482
of Rubber by Fillers	II, 21
of Rubber by Pigments	II, 216
of Rubber, Carbon	X, 395
Reinforcing Action and Other Properties of Titanium Fillers in Rubber Stocks	VI, 106
Reinforcing Action of Pigment Mixtures on Rubber Compounds	IV, 248
Refraction	
and Structure in Rubber, Double	IV, 83
Index of	VII, 608
of Stretched Rubber	II, 545
Refractive Exponents of Rubber and Gutta-Percha Hydrocarbons	VI, 92
Refractive Index of Rubber	VIII, 421
Refractometry of Rubber and Gutta-Percha Hydrocarbons. I. Influence of Depolymerization and Oxidation on the Refractive Exponents of These Hydrocarbons	VI, 92
Reinforcing Fillers, Tear Resistance	VI, 465
Relation between Aging and Temperature	X, 170
Relation between Artificial Aging Tests and Natural Aging	III, 144
Relation of Volume Change to the Mechanism of Rubber Vulcanization	VII, 693
Relationship between Forces and Deformations, with Special Reference to Rubber	III, 62
Remarks on the Formation of Jellies in Rubber Solutions Containing Ultra-Accelerators. Influence of the Solvent	V, 296
Remarks on the Measurement of the Plasticity of Rubber	VIII, 55
Report of Raw Rubber Specifications Committee	II, 335
Requirements, Consumers' Crude Rubber	IX, 146
Research on Modified Rubbers.	
III. Adhesive Latex. (a) Preparation of Sticky Latex	VII, 450

	Volume and Page
(b) Characteristics of and Tests on Sticky Latex	VII, 452
IV. Oxidation of Rubber with Aqueous Hydrogen Peroxide-Acetic Acid Mixtures	VII, 454
V. Technological Properties of Chlorinated Rubbers from Latex	VIII, 613
Va. Technological Properties of Rubber Oxidation Products	VIII, 614
VI. Oxidation of Rubber Solutions with Gaseous Oxygen in Presence of Catalysts	VIII, 335
VII. Expanded Chlorinated Rubber	VIII, 616
Appendix. Composition of Some Chlorinated Rubbers	VIII, 622
Researches on the Structure of Rubber	I, 401
Residual Elongation, Optimum Vulcanization Determined by	VIII, 548
Resilience in Testing Channel Black	X, 807
Resiliometer,	
Impact	VII, 591
New Rebound	X, 820
Resin, Plioform a New Molding	VII, 546
"Resins" in Zinc Oxide-Accelerator Mixings, Rubber	IV, 156
Resistance	
of Rubber as Engineering Material	VI, 1
of Anisotropic Rubber Sheets to Cutting and to Tearing	VII, 289
to Deterioration, Fundamentals of	VI, 193
to Flexing	V, 90
Resistivity, Surface, of Hard Rubber	X, 532
Restraining of Vulcanization in Rubber Manufacture	VIII, 230
Retardation of Aging by Surface Application of Antioxygens	III, 370
Retraction of Rubber Compounds	III, 764
Reversible Vulcanization by Organo-Metallic Derivatives	VII, 516, 520
Revertex and Revultex, Electrodeposition of Rubber from	VI, 422
Revultex, Electrodeposition of Rubber from	VI, 422
Rheology of Raw Rubber	X, 214
Road Surfacing, Rubber Latex for	X, 199
Roentgenographic	
Examination of μ-Polychloroprene	VI, 113
Investigations of Stretched Vulcanized Rubber	X, 121
Rolls, Chilled Iron	I, 369
Rubber	
VII. Purification and Fractionation of Rubber	II, 367
VIII. Preparation and Molecular Size of Isorubber Nitrone	II, 373
IX. Cryoscopic Measurements of Rubber Solutions and the Separation of Mixed Phases from Benzene Solutions of Rubber	III, 487
XII. Levulinic Acid Peroxide from Rubber	IV, 381
XIII. Ozone-Decomposition of Rubber	IV, 386
XIV. Behavior of Rubber with Iodine Chloride and with Dithiocyanogen	IV, 399
XV. Polymerization of Rubber, Isoprene, and Styrene by Light in the Presence of Sensitizing Agents	VII, 184
XVI. Method of A. R. Kemp for the Determination of the Iodine Number of Rubber.	VII, 587
XVII. Detection of Methylglyoxal and the Ozone Cleavage of Rubber	IX, 558
Antioxygens. III. The Behavior of Natural and Artificial Protective Agents toward Sunlight and Ultra-Violet Light. (Preliminary communication)	VI, 391
and Thioglycolic Acid	VI, 71
as It Is Revealed by X-Rays	II, 225
Chlorinated, Composition of Some	VIII, 622
from Latex Coagulated with Sulfuric Acid	VIII, 274
Hydrocarbon	VI, 351
Constituents of	V, 453, 537
Crystalline	V, 119; X, 135, 393
Crystallization of Pure	VIII, 214
Gutta-Percha, Balata, and	I, 254; V, 51; VI, 92
Heat Capacity, Entropy, and Free Energy of	VII, 264
Purification of	I, 163
Sol	VI, 367
Sol, Gel, and Total	VIII, 210
in Compression	X, 768
in Paints	VIII, 627
Latex for Road Surfacing	X, 199
Latex. Recent Scientific and Technical Developments	V, 469
-Lined Equipment. Fundamental Principles of Design	X, 564
Pendulum, the Joule Effect and the Dynamo Stress-Strain Curve	VIII, 151
Plasticity Control. Significance and Value of Recovery Measurement of Williams Plastometer	VII, 718
Production	IX, 154
Sols	VI, 371
Solutions	V, 260, 625
Solvents and Substances Which Lower the Viscosity of Rubber Cements	IX, 428
Structure Research and Its Bearing on the Elastic Properties of Colloids in General	II, 301
Vibration Insulators. Some Characteristic Properties and Tests	VI, 299
in Lubricants	VIII, 629
Rubbone	VIII, 624
Russell Effect with Rubber	VII, 309
Saponification	
and Saponification Value of Raw Rubber	VIII, 610
Value, Influence of Storage and Heating at 100° C. on	IX, 35
Value of Acetone Extract	IX, 308
Scheme for Accelerator Classification	I, 410

	Volume and Page
Scorch Retarders and Scorch-Retarding Materials	V, 66
Scorching and Other Plasticity Changes in Rubber Compounds on Heating	IV, 552
Scorching Qualities of Accelerators	II, 68
Scrap, Extraction Process	IV, 450
Secondary Changes during Vulcanization of Ebonite. Part 1	X, 516
Selection and Use of Age Resisters in Rubber Compounds	VII, 663
Selenium	
in Rubber, Action of	IV, 519
in Vulcanizates	VIII, 167
Kinetics of Vulcanization with	II, 650
Self-Vulcanizing Cements	IX, 38
Semi-Ebonite	
Part 1	VIII, 554
Part 2	IX, 468
Separation and Identification of Sol Rubber Hydrocarbons	VI, 367
Serum	
Components in Raw and Vulcanized Rubber	X, 716
of Hevea Latex, Quebrachitol from	III, 1
Set-Up, Rate of	X, 508
Shear, Plastic Properties at High Rates of	VII, 248
Shear-Resistance of Rubber	III, 523
Shearing Disk Plastometer for Unvulcanized Rubber	VII, 564
Sheet Rubber, Variations in Plantation	I, 509
Shelf-Aging, *vs.* Accelerated Aging	III, 156
Shellac, Thermoplastic Products with Properties Similar to	I, 1, 11
Shock-Absorbing Quality of Rubber	VIII, 528
Short Note on the Tensile Testing of Rubber	V, 351
Simplification and Improvement in the Determination of Copper in Fabrics and Rubberized Materials	V, 356
Simplified Extrusion-Plastometer for Unvulcanized Rubber	IX, 496
Simplified Goodrich Plastometer	III, 295
Size of Fine Pigments, Particle	V, 202
Smoked Sheet and Crepe Rubber, Defects in	III, 264
Sodium-Butadiene Rubber	VIII, 39
Sodium Rubber	V, 1
Soft Rubber	
Under Constant Load	V, 520
Vulcanization	VII, 538
Vulcanization, Chemistry of	VII, 89, 688; X, 255
Soft Vulcanized Rubber	I, 211
Soft Vulcanized Rubber. Effect of Temperature and Oxygen Pressure on Aging Rate	X, 336
Softened Rubber	IX, 240
Softeners	
and Anti-Softeners	I, 498
Hydrazines as Rubber	IX, 339
in Rubber Compounding, Fatty Acid	VIII, 571
in Tread Stock, Value of	IV, 560
Softening and Freezing of Crepe	X, 7
Sol Rubber	
Hydrocarbon, Separation of	VI, 367
Hydrocarbon, Stress-Strain Behavior of	VIII, 210
Molecular Weight of	VII, 518
Separation	
and Identification of	VI, 367
of Gel and	X, 641
of Pure Rubber into	I, 167
Sols	
Action of Organic Accelerators on	VI, 273
Action of Organic Acids on Rubber	VIII, 73
Action of Organic Bases on	IX, 15, 291
Action of Ostromislensky's Vulcanizing Agents on	VI, 400
Peculiarity of Some Accelerators toward	IX, 291
Solvation of Rubber	VI, 265
Structural Viscosity in Some Lyophilic	VI, 371
Soling, Crepe, Tests on	X, 500
Solubility	
of Organic Compounds in Rubber	V, 420
of Oxygen in Rubber and Its Effect on Rate of Oxidation	III, 678
Soluble and Insoluble Rubber	V, 278
Solution (s)	
Action of Organic Acids on	IX, 17
Aging of Rubber	V, 618
Benzene Solutions of Rubber and Gutta-Percha, Absorption of Nitrogen by	X, 254
Colloidal, Influence of Precipitating Agents	V, 626
Colloidal, Structure of Rubber in	X, 643
Containing Ultra-Accelerators	V, 296
Cryoscopic Measurements of	III, 487; IV, 201
Crystallization of Sulfur from Rubber	VIII, 250, 499
Degradation of	IV, 505; V, 121; VII, 632
Further Studies of	V, 608
Influence of Oxygen on Degradation of	VI, 111
Limiting Degradation of	VI, 376
Micellar and Molecular	V, 123

	Volume and Page
of Different Concentrations. Rubber	V, 121
of Gel Rubber Hydrocarbon	VIII, 214
of Rubber	V, 123, 260
Oxidation of Rubber	VIII, 335
Properties of Dried Rubber	VII, 297
Rubber in	V, 618
Solvents for	IV, 361
State of Rubber in	V, 249; VI, 436
Surface Tension of	IV, 354; VII, 302; VIII, 69
Viscometric Studies	VIII, 259
Viscosity of Rubber	III, 604; IV, 8; VIII, 593
Characteristics of	X, 76
Measurements of	VIII, 579
Viscous	VIII, 375
Vulcanization of Rubber in Concentrated	V, 630
Solvation	
of High Molecular Substances, Especially Rubber	III, 409
of Macromolecules	VI, 265
of Rubber in Different Solvents	X, 235
of Rubber Sols	VI, 265
Solvents	
Action of, with Rubber	IV, 223
and Substances Which Lower the Viscosity of Rubber Cements	IX, 428
Effect on Stress-Strain Curve of	III, 19
Hydrorubber in	IX, 579
for Solutions	IV, 361
Properties of Rubber against	III, 242
Swelling of Rubber in	X, 235
Technical Note on Use of	IV, 361
Some Aspects of Double Refraction and Structure in Rubber	IV, 83
Some Aspects of Plasticity and Its Determination	VI, 236
Some Engineering Problems in the Rubber Industry	III, 343
Some Factors Affecting the Resistance to Flexing	V, 90
Some Features of Sulfur in Rubber Manufacture	I, 346
Some Fundamental Rubber Problems	IV, 465
Some New Laboratory Work	II, 197
Some Notes on Artificial Aging Tests for Rubber	III, 164
Some Observations on Carbon Black	III, 111
Some Observations on Rubber Testing	VII, 142
Some Observations on Rubbers with Low Nitrogen Content	II, 431
Some Observations with Ultra-Accelerators	II, 59
Some Observations on Accelerator Practice and Modern Compounding	VII, 641
Some Physical Properties of Isoprene	X, 451
Some Practical Aspects of Rubber Evaluation	II, 406
Some Practical Methods of Measuring Gauge at Calenders	II, 531
Some Properties of Carbon Black	III, 418
Some Properties of Carbon Black Adsorption	IV, 407
Some Studies Relating to Compression and Shear Resistance of Rubber	III, 523
Sources and Application of Cooling Water	I, 367
Sovprene. Chloroprene Synthetic Rubber	IX, 383
Spacings of Rubber and Cellulose, Long	IV, 213
Specifications for Rubber Goods and the Value of Performance Tests	I, 146
Specific Gravity	
of Preserved Latex	VIII, 284, 448
of Rubber before Vulcanization	VI, 103
of Rubber in Latex	VIII, 443
of Vulcanizates, Errors in Previous Calculations	IV, 24
Specific Properties of Artificial [Buna] Rubber	X, 17
Specific Volume, Compressibility and Volume Thermal Expansivity of Rubber-Sulfur Compounds	VIII, 401
Spectrum	
Infrared of Rubber	X, 697
of Rubber and Some Related Hydrocarbons, Raman	IX, 275
Raman	IX, 275, 521
Spiral Model of Rubber	III, 201
Spots on Rubberized Fabrics, Causes of	V, 363
Squalene and Hydrosqualene Solutions	IX, 573
Stability of Abiarana Gutta-Percha Latex	X, 272
Stabilizers of Latex, Natural	IX, 130
Stabilizing Agents for Latex Mixtures	VII, 252, 544
Standardization of Ozone Testing	IV, 13
Standard Laboratory Procedure for Physical Testing Outline of Tentative	III, 179
State of Cure	VI, 525
State of Rubber in Solutions Based on the Surface Properties of Solutions	V, 249
State of Rubber in Solutions. Part II. Effect of Temperature on the Viscosity of Solutions of Various Concentrations	VI, 436
Stearic Acid	
Adsorption by Carbon of	II, 633, 636
and Other Dispersing Agents, Effect of	VIII, 470
Effect of, on Crude Rubber	II, 611, 633
Effect on Crude Rubbers	II, 611
Effect on Reclaimed Rubber	II, 627
Effect on Tread Abrasions	II, 623

	Volume and Page
in Litharge-Cured Rubber Compounds	II, 638
Reinforcement and	IX, 301
Stearic and Oleic Acids as Rubber-Compounding Ingredients	II, 619
Stiffeners, Unvulcanized Stocks Containing	VII, 538
Storage	
Effect on Milled Crude Rubber	IV, 417
Under Water, Change of Electrical Properties during	I, 39
Variability of Plantation Rubber after Storage	V, 219
Strength and Stretch of Double-Texture Rubber Goods	III, 531
Stress and Strain Properties of Carbon Black Stock	IV, 404
Stress of Rubber, Compression	VI, 126
Stressed Vulcanized Rubber, Thermodynamics of	III, 304
Stresses, Behavior of Rubber under Repeated	V, 79
Stress-Strain	
Behavior of Sol, Gel, and Total Rubber Hydrocarbon	VIII, 210
Curve, Effect of Solvents on	III, 19
Curves of Rubber, Autographic	III, 689
Curves of Vulcanized Rubber	VII, 610
Determinations, Reduction of	II, 668
Diagram at High Speed, Determining	X, 317
Properties, Effect of Temperature on	V, 1
Relationship in Ebonite	VII, 197
Relationships of Vulcanized India-Rubber	
Part I. The Inflection Point	V, 486
Part. II. Effect of Mastication on the Properties of Vulcanized Rubber	V, 475
A Correction	V, 504
Stretch	
Effect on Permeability of Rubber to Air	IV, 576
Elastic	X, 697
of Double-Texture Rubber Goods	III, 531
Stretched Latex Vulcanizates, Thermal Effect of Joule Effect on	X, 231
Stretched Rubber	
Aging of	I, 106
Atmospheric Cracks in	IV, 490
Crystals in	IX, 52
Double Refraction of	II, 545
Effects of Ozone on	I, 120
Stretched Vulcanized Rubber	VIII, 174
Roentgenographic Investigations of	X, 121
Stretching	
Change of Volume on	X, 412
Mechanism of Elastic	VIII, 192
Temperature Change of Rubber under Adiabatic	III, 403
Structural	
Changes	
during the Processing of Rubber	III, 716
in Thermally Plasticized Rubber	IX, 227
Differences in Masticated and Unmasticated Raw Rubber Mixtures and Vulcanizates and Their Significance from a Practical Point of View	III, 35
Formula for Ebonite	VII, 520
Viscosity in Some Lyophilic Sols. II. Rubber Sols	VI, 371
Structure	
in Rubber	IV, 83, 495
Mathematical Treatment of a Theory of Rubber	VIII, 23
of Crystallized Rubber	X, 242
of Elastic Colloids	VII, 273
of Gutta-Percha Based on Studies with Electron Rays	VII, 603
of Polystyrene	X, 150
of Rubber and the Mechanism of Elastic Stretching	VIII, 192
Investigation by Electron Diffraction	IX, 409
Researches on	I, 401
Tear Resistance and	VIII, 122
of Synthetic Types of Rubber. Polychloroprenes	X, 126
of Unstretched Rubber Based on Studies with Electron Rays	VIII, 1
Relation of Time Lag to Rubber	VII, 505
Research on Rubber	II, 301
Theory of Rubber	VIII, 23
Viscosity of Rubber Solutions	IV, 345
X-Ray Study of	V, 30
Studies in the Interfacial Relationships between Rubber and Fillers. I. Tear Resistance of Vulcanized Rubber	
Part 1. Examination of Testing Methods	VI, 325
Part 2. Tear-Resistance of Rubber Compounded with China Clay	VI, 336
Part 3. Tear-Resistance of Rubber Compounded with Mixtures of Clay and Carbon Black	VI, 342
Part 4. Effect of Small Concentrations of Reinforcing Fillers on Tear Resistance of Vulcanized Rubber	VI, 465
II. Effect of Surface Treatments on Clay as a Rubber Filler	VI, 469
III. Properties of Vulcanized Rubber Prepared from Compounded Latex	VI, 473
IV. Effect of Mastication on the Properties of Vulcanized Rubber	VI, 475
Studies in the Oxidation of Rubber Mixings	II, 571; III, 563
Studies in the Vulcanization of Rubber	
I. Thermochemistry of Vulcanization of Rubber	III, 631

	Volume and Page
II. Vulcanization of Rubber with Nitro Compounds	III, 639
III. Kinetics of Vulcanization of Rubber with Sulfur and Selenium	III, 650
IV. Theory of Vulcanization of Rubber	III, 659
V. Dielectric Constant and Power Factor of Vulcanized Rubber	V, 367
VI. Thermochemistry	VIII, 112
VII. Unsaturation of Rubber Vulcanized with Nitro Compounds and Benzoyl Peroxide	X, 735
Studies of Aging of Vulcanized Rubber. X. Relation between Degrees of Oxidation of Vulcanized Rubber and Occurrence of Maximum State of Acetone Extracts	III, 378
XI. Consideration of Influence of Free Sulfur on Aging of Vulcanized Rubber	V, 655
Studies of Conditions Affecting the Vulcanization of Rubber	
III. Some Properties of Rubber against Solvents	III, 242
IV. Heat Reaction during Vulcanization	III, 384
V. Effect of Accelerators on the Heat of Vulcanization	IV, 190
Studies of Hard Rubber Reactions. III. Changes in the Acetone Extract during Vulcanization	X, 153, X, 787
IV. Coefficients of Vulcanization	X, 792
V. Loss of Total Sulfur during Vulcanization	X, 795
Studies of Heat of Reaction during Vulcanization of Rubber	IV, 514
Studies of Polymers and Polymerization	
IV. Observations on the Polymerization of Isoprene and 2,3-Dimethylbutadiene-1,3	V, 546
VI. Vulcanization of Methyl Rubber	V, 566
Studies on Acetone Extraction of Raw Rubber	
I. Effect of Time of Heating of Alcohol Solution on Determination of Acid Value of Raw Rubber and Its Acetone Extract	VIII, 604
II. Influence of Heating at 100° C. and Storing of Acetone Extract on Its Acid Value	VIII, 605
III. Effect of Time of Acetone Extraction of Raw Rubber on Acid Value of Acetone Extract and of Acetone-Extracted Residue	VIII, 607
IV. Relation between Time of Saponification and Saponification Value of Raw Rubber and Its Acetone Extract	VIII, 610
V. Influence of Heating at 100° C. and Storage of Acetone Extract on Saponification Value	IX, 35
VII. Time of Acetone Extraction of Raw Rubber and Saponification Value of Acetone Extract and Residue	IX, 308
Studies on Artificial Aging of Vulcanized Rubber	
I. Depolymerization during Heat-Aging	X, 164
II. Relation between Aging and Temperature	X, 170
III. Aging in Nitrogen Gas	X, 174
Studies on Chlorinated Rubber	IX, 311
Studies on Combined Action of Organic Accelerators for Rubber Vulcanization	VI, 402
Studies on Combined Use of Some Different Organic Accelerators	
I. Diphenylguanidine and Mercaptobenzothiazole	V, 657
II. Mercaptobenzothiazole and Methyleneaniline	V, 663
IV. Diphenylguanidine and Benzothiazyl Disulfide	VII, 649
V. Mercaptobenzothiazole and Hexamethylenetetramine	IX, 21
Studies on Joule Effect in Rubber. I. Thermal Effect on Stretched Vulcanized Rubber	VIII, 174
II. Thermal Effect on Stretched Latex Vulcanizates	X, 231
Studies on Rubber in Solution	
I. Studies on Aging of Rubber Solutions	V, 618
II. Structural Viscosity of Rubber Solutions	V, 621
III. Note on Rubber Solutions	V, 624
Studies on Thermochemistry of the Vulcanization of Rubber	
I. Heat of Vulcanization of Rubber	IV, 507
VII. Heating Curves for Vulcanization of the System: Raw Rubber–Sulfur	VI, 56
Studies on Vibration Tests of Rubber	X, 556
Study of Deproteinized Rubber	X, 279
Study of Gutta-Percha and Balata by Means of X-Ray Spectra	IV, 75
Study of Vapor-Pressure Diminution of Rubber Jellies	III, 235
Styrene, Polymerization of	VII, 184
Sulfur	
Chloride Treatment of Dilute Rubber Cements	X, 255
Compounding, Low-	VII, 147
Compounds, Rubber-	VIII, 44, 401; IX, 449
Corrosive Action during Vulcanization	IX, 281
Crystallization from Rubber Solutions	VIII, 250, 499
Determination of	II, 45; VI, 216; VII, 730; IX, 492, 648; X, 378
Dioxide, Formation of Sulfur from	VII, 637
Effect of High *vs.* Low	I, 70
Free	
Determination of	
Titration	IX, 318
Volumetric	V, 360; VI, 412, 512, 518
in Rubber	VIII, 87; IX, 514
of True	I, 172
in Rubber	VI, 518
in Vulcanized Rubber	IX, 172
Influence on Aging	V, 635
Oxidation with Permanganate	VIII, 88
with Rapid Accelerators	IX, 648
from Hydrogen Sulfide and Sulfur Dioxide	VII, 637
in Rubber Manufacture	I, 346
Kinetics of Vulcanization with	II, 650

	Volume and Page
Loss of Total	X, 795
Mix, Rubber-	IV, 100
on Unsaturated Organic Substances, Influence of	VIII, 225
Rapid Method for Determining	IX, 492
Rate of Combination of	II, 209
Required for Vulcanization	V, 295
-Rubber Ratio, Influence of Physical Properties of	I, 137
System, Rubber-	VIII, 456
Vulcanization without	III, 190; V, 489
Vulcanizing Agents Other than	VII, 688
Sulfuric acid	
as a Latex Coagulant	VI, 415
Latex Coagulated with	I, 274
Sunlight	
and Ultra-violet Light	VI, 391
Behavior of Protective Agents toward	VI, 391
Supplies, World's Rubber	IV, 281
Surface	
-Active Substances	VIII, 250, 499
Affinity of Rubber for a Filler	VI, 263
Application of Age-Resisters to Cured Rubber *vs.* Mill Incorporation Prior to Cure	IV, 116
Chemistry of Carbon Black	VIII, 483
Composition of Rubber Globules in Hevea Latex	IX, 551
Cracking of Vulcanized Rubber	VIII, 58
Effect of Treatments on Clay	VI, 469
Energy between Rubber and Fillers	III, 215
Properties of Rubber	VI, 261
Properties of Solutions	I, 249
Resistivity, Study of	X, 532
Tension of Rubber Solutions	IV, 354; VII, 302; VIII, 69
Survey of Latex Coagulants Used by Malayan Small-Holders	X, 267
Swelling	
and Solvation of Rubber in Different Solvents	X, 235
Capacity of Rubber in Mixtures of Solvents in Relation to Their Dielectric Polarizations	X, 105
in Liquids, Constitution of Rubber According to Its	III, 576
Maximum of Rubber Jellies	IV, 64
of Latex	III, 361; VII, 477
of Rubber	II, 591; VII, 462
of Vulcanized Rubber	IX, 70
in Liquids	III, 3
Synthetic Rubber	
Chloroprene, a New	V, 7
Molecular Weight of	VII, 34
Natural and	II, 441, 452, 453; III, 483, 485; IV, 98, V, 1, 530, 537, 543; VII, 516, 518, 520; IX, 74; X, 150, 641
Polar Properties of	X, 713
Sovprene. Chloroprene	IX, 383
Its Industrial Production in the U. S. S. R.	VIII, 430
Synthetic Rubber	VII, 40
Second Paper on New	VI, 115
Third Paper on New	VI, 317
Types of Rubber, Structure of	X, 126
T-50 Test for State of Cure	VI, 525
Tackiness of Unvulcanized Rubber	II, 384
Tear Resistance and Structure of Rubber	VIII, 122
Tear Resistance of Vulcanized Rubber	VI, 325, 465
Tearing, Resistance of Anisotropic Rubber to	VII, 289
Technical Applications of Antioxidants	II, 243
Technical Note on the Use of Certain Solvents in Solutions	IV, 361
Technological Characteristics of Softened Rubber	IX, 240
Technological Properties of Chlorinated Rubbers from Latex	VIII, 622
Temperature	
and Frequency, Effect on Dielectric Constant, Power Factor, and Conductivity	VII, 342
and Humidity Control	I, 182, 515; II, 680
Change of Rubber under Adiabatic Stretching	III, 403
Coefficient of Vulcanization. Determination for Mixes Accelerated with Mercaptobenzothiazole and a Crotonaldehyde Aniline Condensation Product	V, 192
Coefficient of Vulcanization of a Litharge Compound	II, 505
Control of Mill Rolls	II, 251
Curing	V, 442
Effect on Plasticity	VII, 265
Effect on Properties of Rubber-Sulfur Mix of Curing	IV, 100
Effect on Stress-Strain Properties	II, 1
Effect on Tensile Properties	VII, 371
of Calender Rolls	II, 248
Pressure and Humidity	III, 99
-Recording Micropress for Studying the Course of Vulcanization	II, 462
-Volume Relationship. Forms of Rubber Indicated by	VIII, 5
Tensile Properties	
Effect of Temperature on	VII, 371
New Autographic Machine for Testing	IV, 591
of Latex Products	VIII, 268

	Volume and Page
Tensile Strength	
at Low Temperatures	VIII, 522
of Java Plantation Rubber	III, 350
Testing, Errors in	X, 180
Tensile Testing	
Machine for Rubber Threads	IV, 456
of Rubber	V, 351
Tensile Tests of Vulcanized Rubber at High Speed	IV, 147
Testing	
Hardness	I, 83
Importance of Control in	II, 680
Laboratory	V, 692
Methods, Physical	X, 615
of Automotive Rubber Parts Assembled under Compression	
I. Deflection under Compression	III, 431
II. Compression-Set and Some Special Tests	III, 452
of Rubber and Rubber-Like Materials for Oil-Resistance	VII, 657
Rubber	VII, 142
Rubber Products Used to Absorb Vibration	I, 503
Tests on Crepe Soling. III. Water Absorption	X, 500
Tetrahydroxyquinone as a Titration Indicator	X, 378
Tetramethylbutadiene	I, 341
Tetramethyloctadiene	III, 485
Tetramethylthiuram Monosulfide, Stocks Accelerated with	V, 39
Tetramethylthiuram Disulfide, Determination of Free Sulfur in Rubber Containing Mercaptobenzothiazole and	IX, 511
Textile Finishes Research	VII, 330
Textiles, Coating with Latex of	I, 116
Theory and Application of the Parallel-Plate Plastimeter	VIII, 587
Theory of Rubber Structure	VIII, 23
The Question of Vulcanization without Sulfur	III, 190
Thermal	
Decomposition of Natural and Artificial Rubber in the Presence of Aluminum Chloride	VI, 64
Effect of Joule Effect on Stretched Latex	X, 231
Effect of Vapors on Rubber	X, 708
Effect on Stretched Vulcanized Rubber	VIII, 174
Plasticization of Rubber	IX, 250
Plasticization of Rubber. I. Structural Changes in Thermally Plasticized Rubber	IX, 227
Plasticization of Rubber	
II. Technical Characteristics of Softened Rubber	IX, 240
Properties of Rubber Compounds	
II. Heat Generation of Pigmented Rubber Compounds	VIII, 138
Thermochemistry	
of Rubber	II, 259; IV, 507
of Vulcanization	I, 112, 631; VI, 56
Thermodynamic Theory of Rubber Fillers	II, 275
Thermodynamics of Rubber	
I. Rubber as a System of Two Phases	I, 397
II. Temperature Change of Rubber under Adiabatic Stretching	III, 403
Thermodynamics of Stressed Vulcanized Rubber	III, 304
Thermoplastic Products Similar to Gutta-Percha, Balata, and Shellac	I, 1, 11
Thiocyanate Method for Determining Free Sulfur, Modification of	IX, 172
Thioglycolic Acid, Rubber, and	VI, 71
Thixotropy and Plasticity in the Rubber Industry	IX, 64
Threads, Impregnability with Rubber of Cord	V, 685
Threads, Tensile Testing Machine for	IV, 456
Threads, Plastic Materials for	VIII, 632
Time and Temperature-Plasticity Relations for Crude Rubber as Measured with the Goodrich Plastometer	II, 607
Tire	
Carcass, Laboratory Flexing Tests of	III, 544
Carcass Stocks, Flexing Test for	III, 333
Compounds, Aging of	V, 175
Design with Relation to Comfort, Flexibility, and Wear	II, 479
Pneumatic	III, 271
Ply Scrap, Extraction Process	IV, 450
Tread Compounds, Fatigue-Cracking Test for	IX, 178
Titanium Fillers in Rubber Stocks	VI, 106
Titration, Determination of Free Sulfur by	IX, 318
Total Rubber Hydrocarbon	VIII, 210
Total Sulfur during Vulcanization, Loss of	X, 795
Transformation of Energy by Rubber	III, 74
Transparency of Rubber Compounds Containing Magnesium Carbonate	X, 299
Transparent Vulcanized Rubber	IV, 1
Tread	
Abrasions	II, 623
Compounds, Air-Bomb Aging Test for	X, 371
Stock, Reclaimed Rubber in	II, 571
Softeners in	IV, 560
Stocks, Test for	IX, 520
Ultra-Accelerators	II, 59; V, 296, 630; VI, 510

	Volume and Page
Ultra-Violet Light	
Action on Dissolved Rubber	IX, 570
Behavior of Protective Agents toward	VI, 391
Effect on Surface Tension	VII, 302
Uniform Vulcanization	IX, 193
Unsaturation	
of Rubber Vulcanized with Nitro Compounds and Benzoyl Peroxide	X, 735
of Rubber Vulcanized with Polynitro Compounds and Benzoyl Peroxide	I, 101
Unstretched Rubber, Structure of	VIII, 1
Unvulcanized Rubber	
Influence of Pigments on	III, 87
Tackiness of	II, 384
Use of Acetylene in the Rubber Industry	X, 492
Use of Factice in Rubber Manufacture	IX, 621
Use of Rubber in Paint Vehicles	VII, 486
Value of Reclaimed Rubber in Tread Stock	II, 517
Value of Rubber Hydrocarbon in Reclaimed Rubber	I, 50
Value of Softeners in Tread Stock	IV, 560
Vapor-Pressure Diminution of Rubber Jellies	III, 235
Variation, Crude Rubber	VII, 525
Variations in Plantation Sheet Rubber	V, 509
Variability in the Plasticity of Plantation Rubber	V, 219
Various Ozonides of Rubber and the General Question of the Existence of Primary Ozonides	X, 114
Verification of the Specific Gravity of Rubber before and after Its Vulcanization	VI, 103
Vibration	
Absorbers, Rubber as	X, 827
Insulators, Rubber	VI, 299
Machine for Testing Rubber Products Used to Absorb Vibration	I, 503
Tests of Rubber	X, 556
Vinylacetylene. Addition of Hydrogen Chloride to	VI, 121
Visco-Elastic Properties of Rubber	VIII, 177
Viscometric Studies of Rubber Solutions	VIII, 259
Viscosities and Molecular Polarizations of Rubber Solutions	IX, 593
Viscosity	
and Molecular Weight of Hydrorubbers	IV, 543
Characteristics of Rubber Solutions	X, 76
in Some Lyophilic Solutions, Structural	VI, 371
Measurements of Gel Solutions	X, 432
Measurements of Solutions of Rubber	IX, 579
Measurements of Squalene	IX, 573
of Latex	VII, 634
of Latex and Latex Mixtures	X, 675
of Raw Rubber	X, 690
of Rubber Cements	IX, 428
of Rubber Solutions under Influence of Benzoyl Peroxide	IV, 8
of Rubber Solutions	III, 604
Structure	IV, 345
of Solutions, Effect of Temperature on	VI, 436
of Thick Rubber Cements, Measurement of	III, 701
Studies on Balata	III, 516
Volatile Constituents of Carbon Black	I, 485
Volume Change to Mechanism of Vulcanization, Relation of	VII, 693
Volume of Rubber on Stretching, Change of	X, 412
Volumetric Determination of Free Sulfur	VI, 412
Volumetric Determination of Free Sulfur in Rubber	VI, 518
Volumetric Method for Determination of Free Sulfur	V, 360; VI, 512
Vulcanizates, Structural Differences in Masticated and Unmasticated	III, 35
Vulcanization	
and Stress-Strain Behavior of Sol, Gel, and Total Rubber Hydrocarbon	VIII, 210
at Elevated Temperature	VIII, 225
Characteristics of Mercaptobenzothiazole Derivatives	X, 329
Chemical Aspects of	X, 203
Chemistry of Soft Rubber	VII, 89,6 88; X, 255
Colloidal Changes during	VIII, 102
Comparison of Rate of Combination of Sulfur with Rubber and Rate of	I, 209
Conditions Affecting	III, 384
Consumption of Accelerators during	II, 551
Corrosive Action of Sulfur during	IX, 281
Course of	II, 462
Disulfide Accelerators of	X, 158
Ebonite, Internal Heating during	IX, 444
Effect of Cadmium Compounds on Organic Accelerators during	V, 393
Effect of Carbon Black on	VIII, 483
Effect on X-Ray Diagram of Gutta-Percha	X, 137
Factors Affecting Rate of	VI, 309
Heat Changes in	VIII, 514
Heat of	IV, 507
Heat of Reaction during	IV, 514
Heat Transfer in	II, 32
High-Speed	X, 743
Hot	VIII, 437
Influence on Index of Refraction	VII, 608

	Volume and Page
Kinetics of	II, 650; IV, 164
Loss of Total Sulfur during	X, 795
Measurement of	VII, 89
Mechanism of Rubber	VII, 693
Minimum of Sulfur Required for	V, 295
Nature of	II, 421; V, 117, 645
of Chloroprene	VI, 309
of Ebonite, Secondary Changes during	X, 516
of Lipin of Hevea Latex	IV, 339
of Rubber	II, 138, III 242, 384; V, 367; VII, 8; X, 735, 743, 762
by Diazoamino Compounds	X, 471
by Organic Peroxides or by Ammonium Persulfate	III, 195
Effect of Simple Carbohydrates on	V, 636
in Concentrated Solution in the Presence of Ultra-Accelerators	V, 630
Latex by Potassium Ferricyanide	X, 762
Theory of	III, 659
Thermochemistry of	VI, 56
with Nitro Compounds	III, 659
Reversible	VII, 516, 520
Organic Accelerators during	V, 393
Overflow during	IV, 24
Process	V, 97
and the Reinforcement of Rubber	VII, 482
of Peachey, Contribution to the	VII, 637
Reaction	I, 201
Reactions during	II, 384; III, 103; V, 39, 389
Specific Gravity before and after	VI, 103
Thermochemistry of	III, 631; IV, 659
Uniform	IX, 193
with Benzoyl Peroxide. I. Contribution to the Knowledge of the Vulcanization Process	V, 97
without Sulfur	III, 190
without the Use of Sulfur	II, 489
Vulcanizing Agents Other than Sulfur	VII, 688
Vulcanizing Reclaim	I, 70
Vultex, Ammonia-Preserved Hevea	II, 108
Water Absorption	
and Diffusion of	X, 660
by Rubber, Measurement of	VI, 24
by Rubber. II. Vulcanized Rubber	VI, 12
(Crepe Soling)	X, 500
of Rubber Compounds	IV, 88
Water Bath Having Submerged Individual Sample-Containers for the Accelerated Aging of Rubber in Air	VIII, 302
Water Diffusion	
through Organic Insulating Materials	VIII, 297
through Rubber	II, 323
Water	
Extraction, Acidity of Raw Rubber by	II, 56
Factors in Use of	I, 364
Immersion in Boiling, Effect on Vulcanized Rubber	IV, 426
in Rubber, Absorption and Diffusion of	X, 660
-Soluble Components of Rubber	X, 574
Storage under, Change of Electrical Properties of Rubber	IV, 39
White Rubber, Influence of Light on	III, 615
Weiss Patent Litigation, Law Involved	II, 93
Williams Abrasion Tester	IX, 502
Williams Method, Control of Plasticity by	III, 293
Work of Retraction of Rubber Compounds	III, 764
World's Rubber Supplies	IV, 281
X-Ray(s)	
Contributions to the Problem of Polymerization	II, 285
Diagram of Gutta-Percha, Effect of Vulcanization on	X, 137
Diffraction of, by Frozen Rubber	X, 462
Diffraction Studies of the Bureau of Standards Rubber Fractions	VII, 503
Investigations on Rubber	IV, 82
Rubber as Revealed by	II, 225
Spectra Study of Gutta-Percha and Balata	IV, 75
Spectrography of Polymers and in Particular Those Having a Rubber-Like Extensibility	IX, 357
Studies of Gutta-Percha and Balata	IV, 445
Study of Amorphous Rubber	IX, 417
Study of Rubber Structure	V, 30
Zinc	
and Lead, Influence on Rate of Cure	V, 39
Oxide	
Chemical and Physical Properties of	VI, 550
Choice and Testing of	VI, 559
"Colloidal"	X, 309
Influence on Accelerators of	IV, 1
in Rubber. I. Chemical and Physical Properties of Zinc Oxide and Their Relation to Rubber-Making Properties	VI, 549
II. Choice and Testing of Zinc Oxide for Rubber Compounding	VI, 559
Particle Size of	VI, 288
Soaps and Mercaptobenzothiazole, Reactions between	V, 384

INDEX OF BOOK REVIEWS AND REVIEWS OF OTHER PUBLICATIONS

AUTHORS

	Volume and Page
AGG, T. R. Tractive Resistance of Automobile and Coefficients of Friction of Pneumatic Tires	II, lxiii
AKOBJANOFF. Dictionnaire Technique du Caoutchouc	X, xxx
ALEXANDER, JEROME, Editor. Colloid Chemistry, Theoretical and Applied	V, lxxvi
Colloid Chemistry. Vol. III	V, ix
ALLEN, HUGH. House of Goodyear, The	IX, xxx
AMERICAN HARD RUBBER COMPANY. Ace Hard Rubber Protection (for Chemical Process Industries)	IX, xx
AMERICAN SOCIETY FOR TESTING MATERIALS	
1931 Index to A.S.T.M. Standards and Tentative Standards	IV, xxxvi
1932 Index to A.S.T.M. Standards and Tentative Standards	VI, xxix
1933 Index to A.S.T.M. Standards and Tentative Standards	VII, xv; IX, xxi
1934 Index to A.S.T.M. Standards and Tentative Standards	VIII, xvi
Manual on Presentation of Data with Table of Squares and Square Roots (1933)	VI, xl
Methods of Test Relating to Electrical Insulating Materials	IV, ix; V, viii; VI, vi
Proceedings of the 34th Annual Meeting	V, xxxvii
35th Annual Meeting	VI, xx
37th Annual Meeting	VIII, xvi
39th Annual Meeting	X, xxii
Specifications and Methods of Test for Textile Materials	IV, ix
Standards, 1930. II. Non-Metallic Materials	IV, ix
1936	X, viii
Book of	VI, ix; VII, xv; VIII, xvi
Standards on Electrical Insulating Materials	IX, ix
Standards on Rubber Products	IX, viii
Standards on Textile Materials	VII, vi; IX, ix; X, viii
Tentative Standards, 1929	III, xi
1931	V, viii, xxxvi
1932	VI, ix, xx
Book of	VII, xv; VIII, xvi
Supplement to Book of A.S.T.M. Standards, 1929	III, xi
1931	V, viii
1932	VI, ix
Symposium on Abrasion Testing of Rubber	V, viii
Developments in Automotive Materials	IV, x
Rubber	X, xxxvi
Tentative Specifications for Cotton Rubber-Lined Fire Hose for Public and Private Fire Department Use	IV, cvii
AMERICAN PETROLEUM INSTITUTE. Petroleum. The Story of an American Industry	VIII, xxxviii
AMERICAN SOCIETY OF MECHANICAL ENGINEERS. Proceedings and Papers of the Fifth Conference of the Technical Experts in the Printing Industry and Organization Meeting of Graphic Arts Research Bureau Held in Philadelphia, Pa., October 8–9, 1934	VIII, xxxvii
AMERICAN WRINGER CO., INC. Rubber Covered Rolls	VI, ix
AMERICAN STANDARDS ASSOCIATION. American Standards Year Book	III, cxiii; VI, xxx
ARIANO, R. L'Ebanite	V, xxxvi
Meccanica del Pneumatico	VIII, xxxvii
ASSOCIATION OF CONSULTING CHEMISTS AND CHEMICAL ENGINEERS, INC. Directory of Association Members	X, xxiii
ATLAS-VERLAG G.M.B.H. Handbuch der Kautschuk und Asbest-Industrie	IX, viii
BACKUS, H. *See* Hopkins, G. R.	
BANKERS' ECONOMIC SERVICE. Rubber. Aspects of the Future Outlook	VII, xxxvi
BARKER, P. W. Rubber Industry, The	IX, viii
Rubber. Some Facts on Its History, Production and Manufacture	IX, xviii
BARY, P. Le Caoutchouc (2nd ed.)	X, ix
Reclaiming of Rubber Products	II, xcvii
BEHAR, M. F. Handbook of Industrial Temperature and Humidity Measurement and Control	VI, xxx
BIJLERT, C. J. VAN. *See* Luytjes, A.	
BLISS, DON C. Markets for Machinery in British Malaya	IV, lxiv
BOBILOFF, W. Anatomie en Physiologie van Hevea Brasiliensis	IV, lxv
BOGGS, CHARLES R. Modern Progress in Rubber Compounding	II, cvi
BRITISH ALUMINUM COMPANY, LTD. Aluminum in the Rubber Industry	IV, ix
BRITISH ENGINEERING STANDARDS ASSOCIATION. British Standard Specification for Friction Surface Rubber Transmission Belting	II, lxiii
BRITISH STANDARDS INSTITUTE. Draft of British Standard Methods for the Analysis and Testing of Latex and Rubber	IX, xxxix
BUREAU OF AGRICULTURAL ECONOMICS, JAVA. Seventeenth Report on Native Rubber Cultivation	VII, xxiv
Eighteenth Report on Native Rubber Cultivation	VII, xxxv
BUREAU OF SCIENCE OF THE PHILIPPINE ISLANDS. 26th Annual Report	II, xcviii
BURGESS, GEORGE K. Annual Report of Director of Bureau of Standards	III, xxxvii; IV, xi
BUTLER, HUGH. The United Kingdom: An Industrial, Commercial and Financial Handbook	IV, viii

	Volume and Page
CABLE, D. E. 1935 Bibliography of Rubber Literature (Excluding Patents)	X, vii
CAHN, RUDOLF E. Brazilian Market for Belting	IV, viii
CARLSMITH, LEONARD E. Economic Characteristics of Rubber Tire Production, The	VIII, xxviii
CASA EDITRICE POLLINI. Plastics and Rubber Year Book, 1932	V, lxv
CEYLON RUBBER RESEARCH SCHEME. Second Quarterly Circular for 1930	IV, viii
Seventh Report	II, xcvii
CHEMICAL COMPANY, THE. Principles of Patent Law for the Chemical and Metallurgical Industries	V, xxxvii
CHEMICAL CATALOG COMPANY. Chemical Engineering Catalog (14th ed.)	III, xi
(15th ed.)	IV, xi
(16th ed.)	V, ix
(17th ed.)	VI, x
(18th ed.)	VII, vii
(20th ed.)	IX, xi
(21st ed.)	X, ix
CHEMICAL FORMULARY CO. Chemical Formulary, The. H. Bennett, Editor. Vol. I	VII, viii
Vol. III	IX, xxx
CHEMICAL MARKETS, INC. Chemical Guide Book. (9th ed.)	VI, xxix
(10th ed.)	VII, xxxvii
(11th ed.)	VIII, xxxviii
CHEMICAL RUBBER PUBLISHING COMPANY. Handbook of Chemistry and Physics. (19th ed.)	VIII, vii
(20th ed.)	IX, xii
(21st ed.)	X, ix
CILLARD, A. D. Annuaire Technique du Caoutchouc, de la Gutta-Percha et des Industries qui s'y Rattachent	III, lxxiv
CORNELL, WILLIAM B. *See* Glover, John G.	
CORBET, A. S. Natural Coagulation of Latex	III, ix
CREANGE, HENRY. Safeguarding Industry Against the Pilfering of Ideas	VII, xvi
CRONSHAW, H. B., Editor. Rubber Industry, The	IX, xxix
Rubber Information. An Industrial and Commercial Compendium	IV, vii
DAILY TELEGRAPH, THE. The British Rubber Industry	III, xxxviii
DAMMERMAN, K. W. Agricultural Zoölogy of the Malay Archipelago	III, viii
DAVIS, ARNOLD R., *et al.* Rubber Textile Symposium	III, cxii
DAVIS, ROYAL E. Cycles in the Automobile Tire Renewal Market in the United States	IV, cix
DAWN, C. F. The Future of Rubber: Whither and How	VIII, vi
DAWSON, T. R., AND B. D. PORRITT. Rubber: Physical and Chemical Properties	VIII, xxxvi
DÉCHETS ET RÉGÉNÉRÉS (Publisher). Déchets et Régénérés (a Monthly Review)	II, xcvii
DEPARTMENT OF AGRICULTURE, INDUSTRY AND COMMERCE, JAVA. Sixth Report on Native Rubber Cultivation	IV, cvii
DICKERSON, WALTER H. The American Rubber Industry	IX, xxix
DONALD, M. B. *See* Stevens, Henry P.	
DUCKE, ADOLPHO. Genus Hevea—Mainly the Brazilian Species	X, vii
DUN, R. G., AND CO. Special Survey of the Rubber Goods Industry	V, lxxv
DUNBROOK, R. F., AND V. N. MORRIS, Editors. The Science of Rubber. Edited by K. Memmler. Authorized English Translation	VIII, xiv
DUNLOP RUBBER CO., LTD. Dunlop 60% Latex	V, lxv
DU PONT DE NEMOURS AND COMPANY, E. I. Antioxidants	IV, xxxv
Bus and Truck Tubes	III, cxii
Chlorinated Hydrocarbons	IX, xx
Combination Inner Tube Patch Material	III, x
Hard Rubber Compounding	VI, xxviii
White Sidewalls	III, lxxvi
EATON, B. J. Guide to the Preparation of Plantation Rubber. Rubber Research Institute of Malaya. Planting Manual No. 1	II, xxviii
1934 Report of the Rubber Research Institute of Malaya	IX, viii
EDMINSTER, LYNN RAMSAY. *See* Wallace, Benjamin Bruce.	
EGLENE, LÉON, Editor. Le Recaoutchouteur Français	II, lxiii
EGLOFF, GUSTAV. Reactions of Pure Hydrocarbons	X, xxxii
EHRMAN, HERBERT A. Cotton in the Rubber Tire and Tube Industry	III, x
EISENHOWER, MILTON S., Editor. Yearbook of Agriculture	V, lxxv
ELLIS, CARLETON. Chemistry of Synthetic Resins	IX, x
ESCH, WERNER. Taschenbuch für Gummitechniker	IV, xxxiv
Taschenbuch 1934 für Gummitechniker	VII, xv
FAIRBAIRN, JAMES. Some Aspects of Propaganda in the Rubber Industry	IX, xx
FARREL-BIRMINGHAM COMPANY. Control of Quality and Costs in Batch Mixing and Compounding of Rubber and Heavy Plastics	V, xxxvi
See also New Jersey Zinc Company.	
FEDERAL SPECIFICATIONS BOARD. Proposed Federal Specifications	VI, ix
FINANCIAL NEWS, THE. Rubber	VII, xxxv
FIRESTONE, HARVEY S., JR. Romance and Drama of the Rubber Industry	VI, xxiv
FISCHER, EMIL J. Gutta-Percha and Balata. Their Substitutes and Mixtures	VII, xxv
FISHER, HARRY L. The Chemistry of Rubber	III, lxviii
Contribution of the Chemist to the Rubber Industry for the Advancement of Civilization, The	VIII, xxxvii
Rubber: Newer Theoretical and Practical Developments	IV, xxxiv
FREUNDLICH, H. Chemistry of Rubber	IX, xviii

	Volume and Page
GAIN, FRANÇOIS-J. Sur la Saignée de l'Hevea	IX, xviii
GARDNER, WILLIAM. Chemical Synonyms and Trade Names (4th ed.)	X, ix
GENERAL ATLAS CARBON CO. Development of the Banbury Mixer	X, viii
GENERAL ELECTRIC COMPANY. Electric Equipment for Handling Heavy Material	III, lxxvi
Industrial Cable	VIII, xxviii
Synchronous Motors (1929)	III, xxxv
GÉNIN, GEORGES. Chimie et Technologie du Latex de Caoutchouc	VII, xxiii
GEORGE, HEINZ. Die Lage der Kautschuksmarktes in der Nachkriegszeit	III, xxxviii
GHOSH, H. H. Realm of Rubber, The	II, lxi
GLOVER, JOHN G., and WILLIAM B. CORNELL. Development of American Industries	VI, vi
GOODRICH COMPANY, THE B. F. Farm Tractor Tire Handbook	IX, xl
Goodrich Engineering Data of Industrial Rubber Goods	VIII, xv
Goodrich Load and Inflation Pressure Table for Trucks and Buses	IX, xli
Handbook of Industrial Tires	IX, x
The Story of the Elastotype	VIII, xxxvii
Wonder Book of Rubber	V, lxv
GOODYEAR, CHARLES. Gum-Elastic and Its Varieties, with a Detailed Account of Its Applications and Uses and of the Discovery of Vulcanization	X, xx
GOODYEAR TIRE AND RUBBER COMPANY, THE. Goodyear Motion Pictures	VIII, xxix
The Story of the Tire	VII, xvi; VIII, xxix
GOW, WILSON, AND STANTON, LTD. Rubber and Rubber Shares	III, lxxvii
GRAFE, VICTOR. Kautschuk, Tier- und Pflanzenfette, Wachse	III, viii
GRIST, D. H. Malayan Agricultural Statistics, 1935	X, vii
Outline of Malayan Agriculture	IX, xl
GUERRERO, JUAN BLANCH, Editor. La Goma	II, lxiii
HAINES, W. B. Uses and Control of Natural Undergrowth on Rubber Estates	VIII, vi
HARPER AND BROTHERS. Men Working: A Story of the Goodyear Tire and Rubber Company	V, xxxv
HAY, ALEXANDER. Uses of Rubber in Commercial Horticulture	X, xxxii
HAUSER, E. A. Latex, Its Occurrence, Collection, Properties and Technical Application	III, lxxiii
My World Trip	IX, xi
——, Editor. Handbuch der Gesamten Kautschuktechnologie	VIII, xxvi
——, AND KURT MAIER, Editors. Gummi-Kalender, 1929	II, lx
Gummi-Kalender, 1930	III, xxxv
HAVEN, GEORGE B. Industrial Fabrics	VIII, xiv
HERMANNS, HUBERT. Techno-Dictionary	IV, xi
HENDERSON, F. R. Rubber: A Statistical Appraisal	VII, xxxv
Rubber Exchange of New York, Inc. Fourth Annual Report, 1929	III, xxxvii
HENDERSON RUBBER REPORTS, INC. Rubber	II, lxi
HENTZ AND CO., H. Crude Rubber	II, lxi; III, lxxvii
HERCULES POWDER COMPANY. Tornesit	VIII, xvii
HILL, LTD., LEONARD. Rubber Information	V, lxxv
HODGMAN, CHARLES D., Editor. Handbook of Chemistry and Physics (17th ed.)	VI, xxix
(18th ed.)	VII, vii
HOLLAND, L. W. Asiatic Production	IX, xx
HOLT, E. G. British Colonial Office Reports on the Rubber Situation	II, xcvii
Domestic Renewal Sales of Automobile Casings	IV, x
HOPE, E., SHERRATT, AND HUGHES. Chemists' Year Book for 1936 (18th ed.)	IX, xli
HOPKINS, G. R., AND H. BACKUS. Carbon Black in 1929	IV, xxxv
HOUWINK, R. Elasticity, Plasticity and Structure of Matter	X, xxx
HUBER, INC., J. M. Evaluating Carbon Black for the Rubber Industry in the Huber Laboratory	X, xxii
HÜBNER, GUSTAVKARL. Kautschuk. Eine Wirtschaftsgeographische Monographie	VII, vi
HUGHES. *See* Hope, E.	
HULL, CALLIE. *See* West, Clarence J.	
IMPERIAL ECONOMIC COMMITTEE. Survey of the Trade in Manufactured Rubber Goods	III, lxxvi
IMPERIAL INSTITUTE. Investigations of the Imperial Institute on Samples of Plantation Para Rubber from Ceylon	II, lxii
INDIA RUBBER WORLD. Annals of Rubber	IX, xxix
Compounding Ingredients for Rubber	X, vii
INDUSTRIAL PRESS, THE. Hoyer-Kreuter Technical Dictionary	V, lxvi
INGELS, CLARENCE W. National Directory of Commodity Specifications	V, lxxv; VI, vi
INSTITUTION OF THE RUBBER INDUSTRY. List of Members	V, vii
Regulations for the Licentiateship	VII, vii
INTERNATIONAL ASSOCIATION FOR RUBBER AND OTHER CULTIVATIONS IN THE NETHERLANDS INDIES	
Adhesion Problems in Connection with Rubber Flooring	III, lxxvi
Annual Report, 11th (1933) (Technical Report)	VII, xxxv
15th	II, lx
16th	III, lxxv
17th	IV, cviii
18th	VI, vii
INTERNATIONAL RUBBER REGULATION COMMITTEE. Statistical Bulletin of the	VIII, xv
JACOBS, F. La Coloration du Caoutchouc	III, cxii
Memento de l'Industrie du Caoutchouc	IX, xxxix
JOHNS, LTD., R. H. Modern Shoe Dressings	VIII, xxxviii
JOHNSON, C. R. Two Years' Experience with Certified Carbon Black	III, xi
JONES, WEBSTER N. Annual Survey of American Rubber Chemistry for 1936	X, xxxi

	Volume and Page
JUDA, FRANZ. Organization of the World Rubber Markets	IV, cvii; V, vii
KIRCHHOF, F. Les Progrès de la Technologie du Caoutchouc	III, vii
KLINE, GORDON M. Organic Plastics	IX, xl
KUHN, ALFRED. Wörterbuch der Kolloidchemie	VI, x
KUNHARDT, J. C. G. The Future of Rubber	III, lxxv
LANGE, NORBERT ADOLF. Handbook of Chemistry	X, xxxii
LA REVUE GÉNÉRALE DU CAOUTCHOUC. Encyclopédie du Caoutchouc et des Industries qui s'y Rattachent	II, lx
LAWRENCE, JAMES COOPER. The World's Struggle with Rubber	X, xxxv
LEIGHOU, ROBERT B. Chemistry of Engineering Materials	V, ix
LIESEGANG, RALPH E., Editor. Kolloidchemische Technologie	V, xxxviii
LINDEMANN, WALTER. Handbuch der Kautschuk-Industrie und Asbest-Industrie (Handbook of Rubber and Asbestos Industries)	IV, cviii
LUTTRINGER, A. D. La Gomme de Balata	II, lxi
LOPEZ, LUIS PASCUAL MEJAS. Manual de la Industria de la Goma	X, xxxi
LUYTJES, A., AND C. J. VAN BIJLERT. Fifteenth Report on Native Rubber Cultivation	VII, xv
Sixteenth Report on Native Rubber Cultivation	VII, xv
MACBETH, COLIN. Rubber and Automobiles	VI, xxxix; VII, xvi
McPHERSON, A. T. Reclaimed Rubber	V, vii
Rubber and Railways	V, viii
MAIER, KURT. *See* Hauser, E. A.	
MANN, C. E. T., AND C. C. T. SHARP. History and Description of Clones of Hevea Brasiliensis	VI, xxxix
MARCHIONNA, FREDERICK. Latex and Its Industrial Applications	VI, xix
MATHIESON, AND SONS, F. C. Rubber Facts and Figures	III, xxxvii
MEMMLER, K., Editor. Handbuch der Kautschukwissenschaften	III, lxxiii
Science of Rubber. Authorized English Translation. *See* Dunbrook, R. F., and V. N. Morris.	
MERZ, OTTO. Kautschuklacke und Kautschukkitte	VII, xxxvi
METROPOLITAN LIFE INSURANCE COMPANY	
First Aid in Small Industrial Plants	IV, xxxvi
Safety Activities in Small Companies	IV, xxxvii
Silicosis	VII, xvi
METALLGESELLSCHAFT (FRANKFORT-AM-MAIN). Periodical Pamphlet No. 3	III, cxii
MINCING LANE TEA AND RUBBER SHARE BROKERS' ASSOCIATION, LTD.	II, lxiii; III, ix, xxxvii; IV, vii; V, xxxv; VI, xxviii; VII, xxiv; VIII, xxxvii
MORGAN, SIDNEY. Preparation of Plantation Rubber	II, lxi
MORRIS, V. N. *See* Dunbrook, R. F.	
MUNDS, WINSLOW, AND POTTER. The Situation in Crude Rubber	VII, xxxv
NATIONAL ASSOCIATION OF PURCHASING AGENTS. Rubber: Report A-9	VII, xvii
NATIONAL ASSOCIATION OF WASTE MATERIAL DEALERS, INC. National Waste Review	III, xxxviii
1934 Year Book and Code Guide	VII, xxxvi
NATIONAL AUTOMOBILE CHAMBER OF COMMERCE. Facts and Figures of the Automobile Industry	II, xcviii
NATIONAL COMMITTEE OF THE CENTENNIAL CELEBRATION. Centennial Celebration of the American Patent System	X, xxi
NATIONAL INDUSTRIAL CONFERENCE BOARD, INC. Picture of World Economic Conditions in the Summer of 1929	III, xxxviii
NATIONAL RESEARCH COUNCIL	
Annual Survey of American Chemistry. Clarence J. West, Editor. (Vol. IV)	III, lxxiv
(Vol. V) 1930	IV, cvi
(Vol. VI) 1931	V, lxxvii
(Vol. VII) 1932	VI, xxviii
(Vol. VIII) 1933	VII, xxv
(Vol. IX) 1934	VIII, xxx
(Vol. X) 1935	IX, xli
Bibliography of Bibliographies on Chemical Technology	V, xxxvii
Bulletin of the National Research Council, (5th ed.). Clarence J. West and Callie Hull, Editors	VI, xxxix
NATIONAL RUBBER MACHINERY CO. Tire Table of Balloon Tires	II, xcviii; IV, cviii
NATIONAL SAFETY COUNCIL. Benzol Health Practices. Pamphlet No. 14	IV, lxv
Compounding Materials Used in the Rubber Industry. Part I	IV, lxv
(Classification and Health Hazards)	X, xxi, xxii
Conveyors	III, x
NAUNTON, W. J. S. Synthetic Rubber	X, xxxi
NETHERLANDS INDIAN DEPT. OF AGRICULTURE, INDUSTRY AND COMMERCE	
6th Report	IV, cvii
8th Report (1931)	V, xxxv
9th Report (1931)	V, lxv
13th Report	VI, xxviii
NEWITT, D. M., Editor. Chemical Engineering and Chemical Catalogue	IV, x
NEW JERSEY ZINC COMPANY. Zinc Oxide as a Rubber Pigment	III, xi
In Conjunction with the Farrel-Birmingham Company. Zinc Oxide Incorporation in the Banbury Mixer	V, lxxvi
NEW YORK BELTING AND PACKING COMPANY. Mechanical Rubber Goods	VIII, xv
NOBLE, ROYCE J. Latex in Industry	IX, xix
O'BRIEN, T. E. H. Crepe Rolling	II, xcvii
Guide to the Preparation of Plantation Rubber in Ceylon	III, xxxvi

	Volume and Page
PEPPERELL MANUFACTURING COMPANY. Cotton from Plant to Product	III, x
PLANTERS' ASSOCIATION OF MALAYA, INC. Annual Report and Year Book, 1928	III, viii
POLLINI, P. A. Annuario delle Materie Plastiche	V, lxv; VII, xvi
PORRITT, B. D. *See* Dawson, T. R.	
PORTER, JERMAIN. Chemicraft Rubber Chemistry Manual	IX, xi
POTTER. *See* Munds, Winslow, and Potter.	
POWERS, R. E. Rubber, Its History and Use	X, xxx
PRAUSNITZ, P. H., AND J. REITSTÖTTER. Elektrophorese, Elektro-Osmose, Elektrodialyse in Flüssigkeiten. (Electrophoresis, electro-osmosis, electrodialysis in fluids)	IV, vi
PRECISION SCIENTIFIC COMPANY. Apparatus for Testing Petroleum Products	IX, xxi
PRYOR, WILLIAM CLAYTON, AND HELEN SLOMAN. The Rubber Book	X, xx
REINHOLD PUBLISHING CORPORATION. Chemical Engineering Catalogue. (19th ed.)	VIII, vii
(20th ed.)	IX, xi
(21st ed.)	X, ix
REITSTÖTTER, J. *See* Prausnitz, P. H.	
RESEARCH ASSOCIATION OF BRITISH RUBBER MANUFACTURERS Summary of Current Literature	III, vii
See also Science Library.	
REVUE GÉNÉRALE DU CAOUTCHOUC, LA. Encyclopédie du Caoutchouc et des Industries qui s'y Rattachent	II, lx
ROSSEM, A. VAN. Rubber Research in Holland	III, xxxv
ROSSMAN, JOSEPH. Law of Patents for Chemists	V, lxv
The Protection by Patents of Scientific Discoveries	VII, xvi
ROWE, J. W. F. Studies in the Artificial Control of Raw Material Supplies. No. 2. Rubber	IV, cvii
ROYLE, VERNON. Onward from the Beginning. An Historical Sketch of the Royle Tubing Machine	VII, xxxvi
RUBBER ASSOCIATION OF AMERICA, INC. American Railway Association Specifications for Mechanical Rubber Goods	II, lxii
RUBBER EXCHANGE OF NEW YORK, INC., THE	VI, ix
By-Laws and Rules	II, xcviii
Sixth Annual Report, 1931	V, vii
RUBBER GROWERS' ASSOCIATION, INC. Crepe Rubber Sole (Plantation finished) Handbook for Repairers	III, x
Digest of Patents Dealing with Rubber and (or) Latex in Road Construction Materials (Excluding Blocks)	VI, xxviii
Rubber and Agriculture	VIII, xvi
Rubber Flooring and Furnishings	VII, xv
Rubber in Aircraft Design	IV, viii
21st Report	III, lxxvii
26th Report	VIII, xxviii
27th Report	IX, xxix
28th Report	X, xxx
Use of Rubber Latex in the Shoe Trade	V, lxxvi
RUBBER INSTITUTE OF MALAYA. Latex Preservation and Shipment	VI, vii
RUBBER MANUFACTURERS' ASSOCIATION, INC., THE Manual of Tire Repairing	II, xcviii; IV, x
Twenty-ninth Year Book (1929)	III, xxxvii
RUBBER RESEARCH INSTITUTE OF MALAYA Annual Report (1928 including initial period)	III, viii
(1929)	III, cxii
(1930)	V, vii
(1931)	VI, vii
(1932)	VI, xxxix
(1933)	VIII, vi
Plantation Sheet Rubber Manufacture	V, lxv
RUBBER ROADWAYS, LTD. Rubber Roadways	V, xxxvi
SCIENCE LIBRARY AND RESEARCH ASSOCIATION OF BRITISH RUBBER MANUFACTURERS. Rubber. Its Antioxidants and Preservatives	VIII, xv
SCIENCE MUSEUM (LONDON). Handbook of the Rubber Exhibition	VIII, xvi
SHARP, C. C. T. *See* Mann, C. E. T.	
SHARPLES, ARNOLD. Diseases and Pests of the Rubber Tree	X, vii
SHAW AND CO., LTD., FRANCIS. Tyre Machinery	VIII, xxix
SHEARER, EDITH L. Bibliography on Rubber Technology; 1924–5. Section I, Latex and Raw Rubber	III, lxxiii
SHEPPERSON PUBLISHING COMPANY. Cotton Facts, 1929	III, xxxvi
1930	IV, xxxv
SHERRATT. *See* Hope, E.	
SOARES, JOSÉ CARLOS DE MACEDO. Caoutchouc. Étude Économique et Statistique	II, xxviii
Rubber. An Economic and Statistical Study	IV, vii
SOCIÉTÉ ANONYME DES MATIÈRES COLORANTES AND PRODUITS CHIMIQUES DE SAINT-DENIS. Produits Speciaux pour L'Industrie du Caoutchouc	VIII, xvii
SOCIETY OF CHEMICAL HOUSE. Annual Reports of the Society of Chemical Industry on the Progress of Applied Chemistry	III, vii
SOCIETY OF CHEMICAL INDUSTRY (LONDON). Progress of Applied Chemistry	III, cxii
SOLIVA, R. Economic View of Rubber Planting	IV, lxiv
STAMBERGER, PAUL. Colloid Chemistry of Rubber	III, xxxv
STAMFORD RUBBER SUPPLY COMPANY. Glossary of Terms for Rubber Manufacturers	VIII, xxix; X, xxi
STANDARD STATISTICS CO. The Next Five Years in American Business Profits. II. The Automobile Tire Industry	III, xxxvii

	Volume and Page
STAUDINGER, HERMANN. Hochmolecularen Organischen Verbindungen: Kautschuk und Cellulose	VI, vii
STENBERG, R. T. Brake Linings	IX, x
STEPHENS, JOHN. *See* Taylor, V. A.	
STEVENS, HENRY P., AND M. B. DONALD. Rubber in Chemical Engineering	VI, xxxix
——, AND W. H. STEVENS. Rubber Latex	VI, xix; IX, xxx
STEVENS, W. H. *See* Stevens, Henry P.	
STRAITS SETTLEMENTS AND FEDERATED STATES (DEPT. OF STATISTICS). Malaya Rubber Statistics, 1930	IV, lxiv
SUMMERS, F. Improvement of Yield in Hevea Brasiliensis	III, lxxiv
TAYLOR, V. A., AND JOHN STEPHENS. Native Rubber in the Dutch East Indies, Report to the Rubber Growers' Association	III, xxxv
THE TIMES OF CEYLON, LTD. Rutherford's Planter's Note Book	IV, lxiv
THIOKOL CORPORATION. A Rubber Plantation in New Jersey	IX, xix
TIRE AND RIM ASSOCIATION, INC. 1929 Year Book	II, lx
1930 Year Book	III, lxxv
1931 Year Book	IV, cviii
UNION DEUTSCHE VERLAGSGESELLSCHAFT. Fünfsprachiges Wörterbuch für den Gummiwarenhandel	III, cxxiii
UNITED STATES BUREAU OF STANDARDS	
Annual Report of the Director	III, xxxvii; IV, xi; VI, vii; X, xxxvi
Cotton Cloth for Rubber and Pyroxylin Coating	V, xxxvii
Guide to the Literature on Rubber	IV, cvi
Industrial Truck Tires	IV, xxxv
National Directory of Commodity Specifications	V, lxxv; VI, vi
Publications Relating to Rubber. (Revised to 1933)	VII, vi
Rubber Cements	VII, xxiv
Rubber Latex	V, xxxvi
Some Properties of Sponge Rubber	III, x
Standards Year Book, 1930	III, lxxv
1931	IV, lxv
1932	V, lxvi
1933	VI, xxix
Tubing, Rubber; Hose, Water and Wash Deck; and Hose, Suction, Water (Smooth Bore)	II, xcviii
UNITED STATES DEPARTMENT OF AGRICULTURE	
Quality of the Cotton Spun in the United States (Year Ending July 31, 1928)	II, xcviii
UNITED STATES DEPARTMENT OF COMMERCE	
Cotton Fabrics and Their Uses	IV, ix
Foreign Commerce and Navigation of the United States for the Calendar Year 1931	VI, x
Foreign Markets for Rubber Boots and Shoes and Rubber Heels and Soles, Section III. Latin American Countries	III, ix
Section IV	III, xxxvii
Products of Manufacturing Industries	VI, vi
Rubber Regulation and the Malayan Plantation Industry	IX, viii
South American Markets for Rubber Sundries and Specialties	III, ix
Tariff Commission. Rubber-Soled and Rubber Footwear (1933)	VI, xxviii
Trends of Manufacturing Costs in the Automobile Tire and Inner Tube Industry, 1914–1931	VII, xv
UNITED STATES RUBBER CO. U. S. Heavy Service Tire Manual and Changeover Guide	III, xxxvi
UNIVERSITY OF MICHIGAN. (Dept. of Engineering Research.) Research Service for Industry	IV, lxv
VANDERBILT CO. R. T. Vanderbilt 1932 Rubber Handbook. W. F. Russell, Editor	V, lxxvi
Vanderbilt Rubber Handbook, 1936 (7th ed.). W. F. Russell, Editor	IX, xl
VAN HARPEN, N. H. Electrometric Determination of the Hydrogen Ion Concentration in the Latex of Hevea Brasiliensis and Its Applicability to Technical Problems	IV, xxxiv; V, lxvi
VULTEX CHEMICAL COMPANY. Vultex	IV, xxxiv
WALLACE, BENJAMIN BRUCE, AND LYNN RAMSAY EDMINSTER. International Control of Raw Materials	III, cxiii
WEST, CLARENCE J. AND CALLIE HULL. Industrial Research Laboratories of the United States	IV, xxxvi
WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY. Engineering Achievements, 1930	IV, xxxvi
WHITTLESEY, CHARLES R. Government Control of Crude Rubber	IV, lxiv
WIEGAND, W. B. Notes on the Carbon-Black Flame	IV, lxv
WILTSHIRE, J. L. Variations in the Composition of Latex from Clone and Seedling Rubber	VIII, vi
WOLF, HOWARD, AND RALPH WOLF. Rubber. A Story of Glory and Greed	IX, xxxix
WRIGHT, CHARLES HERBERT. Some Modern Aspects of Rubber Cultivation	IV, xxxiv

TITLES

	Volume and Page
Ace Hard Rubber Protection (for Chemical Process Industries)	IX, xx
Adhesion Problems in Connection with Rubber Flooring	III, lxxvi
Agricultural Zoölogy of the Malay Archipelago	III, viii
Aluminum in the Rubber Industry	IV, ix
American Railway Association Specifications for Mechanical Rubber Goods	II, lxii
American Rubber Industry, The	IX, xxix
American Standards Year Book	1930, III, cxiii; 1932, VI, xxx
Anatomie en Physiologie van Hevea Brasiliensis	IV, lxv
Annals of Rubber	IX, xxix
Annuaire Technique du Caoutchouc, de la Gutta-Percha et des Industries qui s'y Rattachent	III, lxxiv
Annual Report and Year Book, 1928–1929	III, viii
Annual Report (Malaya, 1928)	III, viii
(Malaya, 1929)	III, cxiii
(Malaya, 1930)	V, vii
(Malaya, 1931)	VI, vii
(Malaya, 1932)	VI, xxxix
(Malaya, 1933)	VIII, vi
(Malaya, 1934)	IX, viii
Annual Report of the Director of the U. S. Bureau of Standards, 1929	III, xxxvii
1930	IV, xi
1931	VI, vi
Annual Reports of the Society of Chemical Industry on the Progress of Applied Chemistry, Vol. III, 1928	III, vii
Annual Survey of American Chemistry (Vol. IV)	III, lxxiv
(Vol. V)	IV, cvi
(Vol. VI)	V, lxxvii
(Vol. VII)	VI, xxviii
(Vol. VIII)	VII, xxv
(Vol. IX)	VIII, xxx
(Vol. X)	IX, xli
Annual Survey of American Rubber Chemistry for 1936	X, xxxi
Annuario delle Materie Plastiche	VII, xvi
Antioxidants	IV, xxxv
Apparatus for Testing Petroleum Products	IX, xxi
A. S. T. M.	
Index to Standards and Tentative Standards, 1931	IV, xxxvi
1932	VI, xxix
1933	VII, xv
1934	VIII, xvi
1936	IX, xxi
Manual on Presentation of Data with Table of Squares and Square Roots	VI, xl
Methods of Test Relating to Electrical Insulating Materials	IV, ix; V, viii; VI, vi
Proceedings of the 34th Annual Meeting	V, xxxvii
35th Annual Meeting	VI, xx
37th Annual Meeting	VIII, xvi
39th Annual Meeting	X, xxii
Specifications and Methods of Test for Textile Materials	IV, ix
Standards, 1930. II. Non-Metallic Materials	IV, ix
1936	X, viii
Standards and Tentative Books	IX, xxi
Standards on Electrical Insulating Materials	IX, ix; X, viii
on Rubber Products	IX, viii
on Textile Materials, 1933	VII, vi
Comm. D-13	IX, ix, xxi
1936	X, viii
Supplement to Book of Standards, 1929	III, xi
1931	V, viii
1932	VI, ix
Standards, Book of	IV, ix; VII, xv
1934	VIII, xvi
Tentative Specifications for Cotton Rubber-Lined Fire Hose for Public and Private Fire Department Use	IV, cvii
Tentative Standards, 1929	III, xi
1931	V, viii
1932	VI, ix, xx
1933	VII, xv
Book of	VII, xv; VIII, xvi
Asiatic Production	IX, xx
Benzol Health Practices, Pamphlet No. 14	IV, lxv
Bibliography of Bibliographies on Chemistry and Chemical Technology	V, xxxvii
Bibliograph of Rubber Literature (Excluding Patents)	X, vii
Bibliograph on Rubber Technology, 1924–5, Section I, Latex and Raw Rubber	III, lxxiii
Brake Linings	IX, x
Brazilian Market for Belting	IV, viii
British Colonial Office Reports on the Rubber Situation	II, xcvii
British Rubber Industry	III, xxxviii
British Standard Specification for Friction Surface Rubber Transmission Belting	II, lxiii
Bulletin of the National Research Council (5th ed.)	VI, xxxix
Bureau of Science, Philippine Islands, 36th Annual Report of the	II, xcviii
Bus and Truck Tubes	III, cxii

	Volume and Page
Caoutchouc, Étude Économique et Statistique	II, xxviii
Caoutchouc, Le (2nd ed.)	X, ix
Carbon-Black Flame, Notes on the	IV, lxv
Carbon Black in 1929	IV, xxxv
Centennial Celebration of the American Patent System	X, xxi
Chemical Engineering and Chemical Catalogue	IV, x
Chemical Engineering Catalog (14th ed.)	III, xi
(15th ed.)	IV, xi
(16th ed.)	V, ix
(17th ed.)	VI, x
(18th ed.)	VII, vii
(20th ed.)	IX, xi
(21st ed.)	X, ix
Chemical Formulary (Vol. I), 1933–34	VII, viii
(Vol. III)	IX, xxx
Chemical Guide Book (9th ed.)	IV, xxix
(10th ed.)	VII, xxxvii
(11th ed.)	VIII, xxxviii
Chemical Synonyms and Trade Names (4th ed.)	X, ix
Chem craft Rubber Chemistry Manual, The	IX, xi
Chemistry of Engineering Materials	V, ix
Chemistry of Rubber, The	III, lxxiii; IX, xviii
Chemistry of Synthetic Resins	IX, x
Chemists' Year Book for 1936 (18th ed.), The	IX, xli
Chimie et Technologie du Latex de Caoutchouc	VII, xxiii
Chlorinated Hydrocarbons	IX, xx
Colloid Chemistry. Vol. III	V, ix
Colloid Chemistry of Rubber	III, xxxv
Colloid Chemistry, Theoretical and Applied	V, lxxvi
Coloration du Caoutchouc, La	III, cxii
Combination Inner Tube Patch Material	III, x
Compounding Ingredients for Rubber	X, vii
Compounding Materials Used in the Rubber Industry (Classification and Health Hazards)	X, xxi, xxii
Compounding Materials Used in the Rubber Industry. Part I	IV, lv
Contribution of the Chemist to the Rubber Industry for the Advancement of Civilization, The	VIII, xxxvii
Control of Quality and Costs in Batch Mixing and Compounding of Rubber and Heavy Plastics	V, xxxvi
Conveyors	III, x
Cotton Cloth for Rubber and Pyroxylin Coating	V, xxxvii
Cotton Fabrics and Their Uses	IV, ix
Cotton Facts (1929)	III, xxxvi
(1930)	IV, xxxv
Cotton from Plant to Product	III, x
Cotton in the Rubber Tire and Tube Industry	III, x
Crepe Rolling	II, xcvii
Crepe Rubber Sole (Plantation Finished) Handbook for Repairers, The	III, x
Crude Rubber	II, lxi; III, lxxvii
Crude Rubber, The Situation in	VII, xxxv
Cycles in the Automobile Tire Renewal Market in the United States	IV, cix
Déchets et Régénérés (Scrap and Reclaim)	II, xcvii
Development of American Industries	VI, vi
Development of the Banbury Mixer	X, viii
Dictionnaire Technique du Caoutchouc	X, xxx
Digest of Patents Dealing with Rubber and (or) Latex in Road Construction Materials (Excluding Blocks)	VI, xxviii
Directory of Association [of Consulting Chemists and Chemical Engineers] Members	X, xxiii
Diseases and Pests of the Rubber Tree	X, vii
Domestic Renewal Sales of Automobile Casings	IV, x
Draft of British Standard Methods for the Analysis and Testing of Latex and Rubber	IX, xxxix
Dunlop 60% Latex	V, lxv
Ebanite, L'	V, xxxvi
Economic Characteristics of Rubber Tire Production, The	VIII, xxviii
Economic View of Rubber Planting, An	IV, lxiv
Eighteenth Report on Native Rubber Cultivation (Java)	VII, xxxv
Eighth Report on Native Rubber Cultivation (Netherlands)	X, xxxv
Elasticity, Plasticity and Structure of Matter	X, xxx
Elastotype, The Story of the	VIII, xxxvii
Electric Equipment for Handling Heavy Material	III, lxxvi
Electrometric Determination of the Hydrogen Ion Concentration in the Latex of Hevea Brasiliensis and Its Applicability to Technical Problems	IV, xxxiv; V, lxvi
Elektrophorese, Elektro-Osmose, Elektrodialyse in Flüssigkeiten. (Electrophoresis, Electro-Osmosis, Electrodialysis in Fluids.)	IV, vi
Eleventh Annual Report (Netherlands Indies)	VII, xxxv
Encyclopédie du Caoutchouc et des Industries qui s'y Rattachent	II, lx
Engineering Achievements, 1930	IV, xxxvi
Evaluating Carbon Black for the Rubber Industry in the Huber Laboratory	X, xxii
Facts and Figures of the Automobile Industry	II, xcvii
Farm Tractor Tire Handbook	IX, xl

	Volume and Page
Fifteenth Annual Report (Netherlands)	II lx
Fifteenth Report on Native Rubber Cultivation	VII, xv
First Aid in Small Industrial Plants	IV, xxxvi
Foreign Commerce and Navigation of the United States for the Calendar Year 1931	VI, x
Foreign Markets for Rubber Boots, Shoes, Heels and Soles	III, ix, xxxvii
Fünfsprachiges Wörterbuch für den Gummiwarenhandel	III, cxxiii
Future of Rubber, The	III, lxxv
Future of Rubber: Whither and How, The	VIII, vi
Genus Hevea—Mainly the Brazilian Species, The	X, vii
Glossary of Terms for Rubber Manufacturers	VIII, xxix; X, xxi
Goma, La	II, lxiii
Gomme de Balata, La	II, lxi
Goodrich Engineering Data of Industrial Rubber Goods	VIII, xv
Goodrich Load and Inflation Pressure Table for Trucks and Buses	IX, xli
Goodyear Motion Pictures	VIII, xxix
Government Control of Crude Rubber	IV, lxiv
Guide to the Literature on Rubber	IV, cvi
Guide to the Preparation of Plantation Rubber	II, xxviii
Guide to the Preparation of Plantation Rubber in Ceylon	III, xxxvi
Gum-Elastic and Its Varieties, with a Detailed Account of Its Applications and Uses, and of the Discovery of Vulcanization	X, xx
Gummi-Kalender 1929	II, lx
1930	III, xxxv
Gutta-Percha and Balata, Their Substitutes and Mixtures	VII, xxiv
Handbook of Chemistry	X, xxxii
Handbook of Chemistry and Physics (17th ed.)	VI, xxix
(18th ed.)	VII, vii
(19th ed.)	VIII, vii
(20th ed.)	IX, xii
(21st ed.)	X, ix
Handbook of Industrial Temperature and Humidity Measurement and Control	VI, xxx
Handbook of Industrial Tires	IX, x
Handbook of the Rubber Exhibition (London)	VIII, xvi
Handbuch der Gesamten Kautschuktechnologie	VIII, xxvi
Handbuch der Kautschuk-Industrie und Asbest-Industrie (Handbook of the Rubber and Asbestos Industries)	IV, cviii
Handbuch der Kautschuk und Asbest-Industrie	IX, viii
Handbuch der Kaukschukwissenschaften	III, lxxiii
Hard Rubber Compounding	VI, xxviii
History and Description of Clones of Hevea Brasiliensis	VI, xxxix
Hochmolecularen Organischen Verbindungen-Kautschuk und Cellulose. (High Molecular Organic Compounds-Rubber and Cellulose)	VI, vii
House of Goodyear, The	IX, xxx
Hoyer-Kreuter Technical Dictionary	V, lxvi
Improvement of Yield in Hevea Brasiliensis, The	III, lxxiv
Index to A. S. T. M. Standards and Tentative Standards	IV, xxxvi; VI, xxix; VII, xv; VIII, xvi; IX, xxi
Industrial Cable	VIII, xxviii
Industrial Fabrics	VIII, xiv
Industrial Research Laboratories of the United States	IV, xxxvi
Industrial Truck Tires	IV, xxxv
International Control of Raw Materials	III, cxiii
International Association for Rubber and Other Cultivations in the Netherlands	II, lx; III, lxxv; IV, cviii; VI, vii; VII, xxxv
Investigations of the Imperial Institute on Samples of Plantation Para Rubber from Ceylon	II, lxii
Kautschuk, Eine Wirtschaftsgeographische Monographie	VII, vi
Kautschuklacke und Kautschukkitte	VII, xxxvi
Kautschuk, Tier- und Pflanzenfette, Wachse	III, viii
Kolloidchemische Technologie	V, xxxviii
Lage der Kautschuksmarktes in der Nachkriegszeit, Die	III, xxxviii
Latex and Its Industrial Applications	VI, xix
Latex in Industry	IX, xix
Latex: Its Occurrence, Collection, Properties and Technical Applications	III, lxxiii
Latex Preservation and Shipment	VI, vii
Law of Patents for Chemists	V, lxv
List of Members (Institution of the Rubber Industry)	V, vii
Malaya Rubber Statistics (1930)	IV, lxiv
Malayan Agricultural Statistics (1935)	X, vii
Manual de la Industria de la Goma	X, xxxi
Manual of Tire Repairing	II, xcviii; IV, x
Markets for Machinery in British Malaya	IV, lxiv
Meccanica del Pneumatico	VIII, xxxvii
Mechanical Rubber Goods	VIII, xv
Memento de L'Industrie du Caoutchouc	IX, xxxix
Men Working: A Story of the Goodyear Tire and Rubber Company	V, xxxv
Methods of Test Relating to Electrical Insulating Materials	IV, ix; V, viii; VI, vi
Modern Progress in Rubber Compounding	II, cvi

	Volume and Page
Modern Shoe Dressings	VIII, xxxviii
My World Trip	IX, xi
National Association of Waste Material Dealers, Inc. 1934 Year Book and Code Guide	VII, xxxvi
National Directory of Commodity Specifications	V, lxxv; VI, vi
National Waste Review	III, xxxviii
Native Rubber in the Dutch East Indies, Report to the Rubber Growers' Association on	III, xxxv
Natural Coagulation of Latex	III, ix
Report of Native Rubber Cultivation (Netherlands Indian Dept.)	IV, cvii; V, lxv, xxxv; VI, xxviii; VII, xv, xxiv, xxxv
Onward from the Beginning. An Historical Sketch of the Royle Tubing Machine	VII, xxxvi
Organic Plastics	IX, xl
Organisation des Weltkautschukmarktes	IV, cvii
Organization of the World Rubber Markets	V, vii
Outline of Malayan Agriculture, An	IX, xl
Periodical Pamphlet No. 3 (Metallgesellschaft)	III, xcii
Petroleum. The Story of an American Industry	VIII, xxxviii
Picture of World Economic Conditions in the Summer of 1929, A	III, xxxviii
Plantation Sheet Rubber Manufacture	V, lxv
Plastics and Rubber. Year Book, 1932	V, lxv
Plantation Rubber, The Preparation of	II, lxi
Principles of Patent Law for the Chemical and Metallurgical Industries	V, xxxvii
Proceedings and Papers of the Fifth Conference of the Technical Experts in the Printing Industry and Organization Meeting of Graphic Arts Research Bureau Held in Philadelphia, Pa., October 8–9, 1934	VIII, xxxvii
Products of Manufacturing Industries	VI, vi
Produits Speciaux pour L'Industrie du Caoutchouc	VIII, xvii
Progrès de la Technologie du Caoutchouc, Les	III, vii
Progress of Applied Chemistry	III, cxii
Propaganda in the Rubber Industry, Some Aspects of	IX, xx
Proposed Federal Specifications	VI, ix
Protection by Patents of Scientific Discoveries, The	VII, xvi
Publications Relating to Rubber (Revised to Sept. 1933)	VII, vi
Quality of the Cotton Spun in the United States (Year Ending July 31, 1928)	II, xcviii
Reactions of Pure Hydrocarbons	X, xxxii
Realm of Rubber, The	II, lxi
Reclaimed Rubber	V, vii
Reclaiming of Rubber Products	II, xcvii
Recaoutchouteur Français, Le	II, lxiii
Regulations for the Licentiateship (I. R. A.)	VII, vii
Research Service for Industry	IV, lxv
Romance and Drama of the Rubber Industry, The	VI, xxi
Rubber	II, lxi; VII, xxxv
A Statistical Appraisal	VII, xxxv
A Story of Glory and Greed	IX, xxxix
An Economic and Statistical Study	IV, vii
and Agriculture	VIII, xvi
and Automobiles	VI, xxxix; VII, xvi
and Railways	V, viii
and Rubber Shares	III, lxxvii
Aspects of the Future Outlook	VII, xxxvi
Book, The	X, xx
Cements	VII, xxiv
Covered Rolls in the Textile Industry	VI, ix
Cultivation, Some Modern Aspects of	IV, xxxiv
Exchange of New York, Inc., The	VI, ix
By-Laws and Rules	II, xcviii
Annual Reports	III, xxxvii; V, vii; VI, ix
Facts and Figures	III, xxxvii
Flooring and Furnishings	VII, xv
Growers' Association, Twenty-first Report	III, lxxvii
Twenty-sixth Report	VIII, xxviii
Twenty-seventh Report	IX, xxix
Twenty-eighth Report	X, xxx
in Aircraft Design	IV, viii
in Chemical Engineering	VI, xxxix
Industry, (1935), The	IX, viii
Industry, The	IX, xxxix
Information	V, lxxv
Information. An Industrial and Commercial Compendium	IV, vii
Its Antioxidants and Preservatives	VIII, xv
Its History and Use	X, xxx
Latex	V, xxxvi; VI, xix; IX, xxx
Manufacturers Association, Inc	IX, xxx
Manual of Tire Repairing, The	II, xcviii; IV, x
Twenty-ninth Year Book (1929)	III, xxxvii
Newer Theoretical and Practical Developments	IV, xxxiv

	Volume and Page
Physical and Chemical Properties	VIII, xxxvi
Plantation in New Jersey, A	IX, xix
Producing Companies with List of Directors and Secretaries	II, lxiii
1929	III, ix, xxxvii
1930	IV, vii
1931	V, xxxv
1932	VI, xxviii
1934	VII, xxiv
1935	VIII, xxxvii
Regulation and the Malayan Plantation Industry	IX, viii
Report A-9 (National Assoc. of Purchasing Agents)	VII, xvii
Research in Holland	III, xxxv
Research Institute of Malaya, 1934 Report of the	IX, viii
Research Scheme (Ceylon) Second Quarterly Circular for 1930	IV, viii
Roadways	V, xxxvi
Soled and Rubber Footwear (1933)	VI, xxviii
Some Facts on Its History, Production and Manufacture	IX, xviii
Textile Symposium	III, cxii
Rutherford's Planter's Note Book	IV, lxiv
Safety Activities in Small Companies	IV, xxxvii
Safeguarding Industry against the Pilfering of Ideas	VII, xvi
Science of Rubber (English Translation)	VIII, xiv
Silicosis	VII, xvi
Situation in Crude Rubber, The	VII, xxxv
South American Markets for Rubber Sundries and Specialties	III, ix
Some Aspects of Propaganda in the Rubber Industry	IX, xx
Some Modern Aspects of Rubber Cultivation	IV, xxxiv
Some Properties of Sponge Rubber	III, x
Special Survey of the Rubber Goods Industry	V, lxxv
Standards Year Book, 1930	III, lxxv
1931	IV, lxv
1932	V, lxvi
1933	VI, xxix
Statistical Bulletin of the International Rubber Regulation Committee	VIII, xv
Studies in the Artificial Control of Raw Material Supplies: No. 2. Rubber	IV, cvii
Summary of Current Literature	III, vii
Sur la Saignée de l'Hevea	IX, xviii
Survey of the Trade in Manufactured Rubber Goods, A	III, lxxvi
Symposium on Abrasion Testing of Rubber	V, viii
Developments in Automotive Materials	IV, x
Rubber	X, xxxvi
Synchronous Motors	III, xxxv
Synthetic Rubber	X, xxxi
Technical Dictionary	V, lxvi
Taschenbuch für Gummitechniker	IV, xxxiv
1934 für Gummitechniker	VII, xv
Techno-Dictionary	IV, xi
The Next Five Years in American Business Profits. II. The Automobile Tire Industry	III, xxxvii
The Situation in Crude Rubber	VII, xxxv
Tire and Rim Association, Inc. 1929 Year Book	II, lx
1930 Year Book	III, lxxv
1931 Year Book	IV, cviii
Tire Table of Balloon Tires	IV, cviii
Tire Table of Balloon Tires and the Cars That Use Them	II, xcviii
Tire, The Story of the	VII, xvi; VIII, xxix
Tornesit	VIII, xvii
Tractive Resistance of Automobile and Coefficients of Friction of Pneumatic Tires	II, lxiii
Trends of Manufacturing Costs in the Automobile Tire and Inner Tube Industry, 1914 to 1931	VII, xv
Tubing, Rubber; Hose, Water and Wash Deck; and Hose, Suction, Water (Smooth Bore)	II, xcviii
Two Years' Experience with Certified Carbon Black	III, xi
Tyre Machinery	VIII, xxix
United Kingdom: An Industrial, Commercial and Financial Handbook, The	IV, viii
U. S. Heavy Service Tire Manual and Changeover Guide	III, xxxvi
Use of Rubber Latex in the Shoe Trade	V, lxxvi
Uses of Rubber in Commercial Horticulture	X, xxxii
Uses and Control of Natural Undergrowth on Rubber Estates	VIII, vi
Vanderbilt 1932 Rubber Handbook, The	V, lxxvi
1936 Rubber Handbook, The	IX, xl
Variations in the Composition of Latex from Clone and Seedling Rubber	VIII, vi
Vultex	IV, xxxiv
White Sidewalls	III, lxxvi
Wonder Book of Rubber	V, lxv
World's Struggle with Rubber, The	V, xxxv
Wörterbuch der Kolloidchemie	VI, x
Yearbook of Agriculture, 1932	V, lxxv
Zinc Oxide as a Rubber Pigment	III, xi
Zinc Oxide Incorporation in the Banbury Mixer	V, lxxvi